

FIG.1

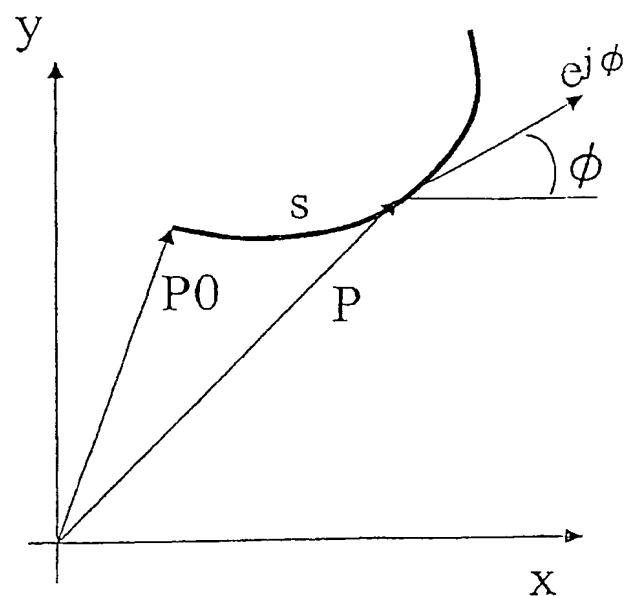


FIG.2

$$0 \leq S = \frac{s}{h} \leq 1$$

$$P(S) = P_0 + h \int_0^S (\cos \phi + j \sin \phi) dS$$

$$\phi(S) = \phi_0 + \phi v S + \phi u S^2$$

P0 : COORDINATE OF STARTING POINT
 ϕ : ANGLE MADE BETWEEN TANGENTIAL DIRECTION AND x-AXIS
h : CURVE LENGTH
s : DISTANCE MOVED FROM STARTING POINT
S : CURVE LENGTH VARIABLE
 $\phi_0, \phi v, \phi u : (const)$

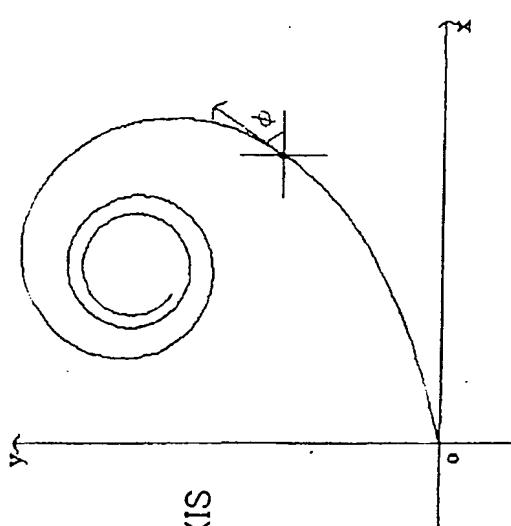


FIG.3

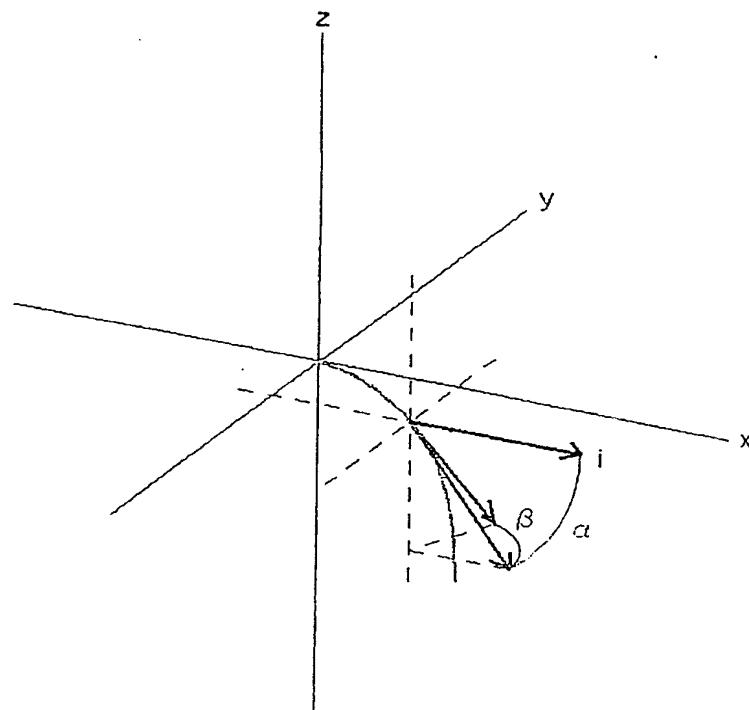


FIG.4

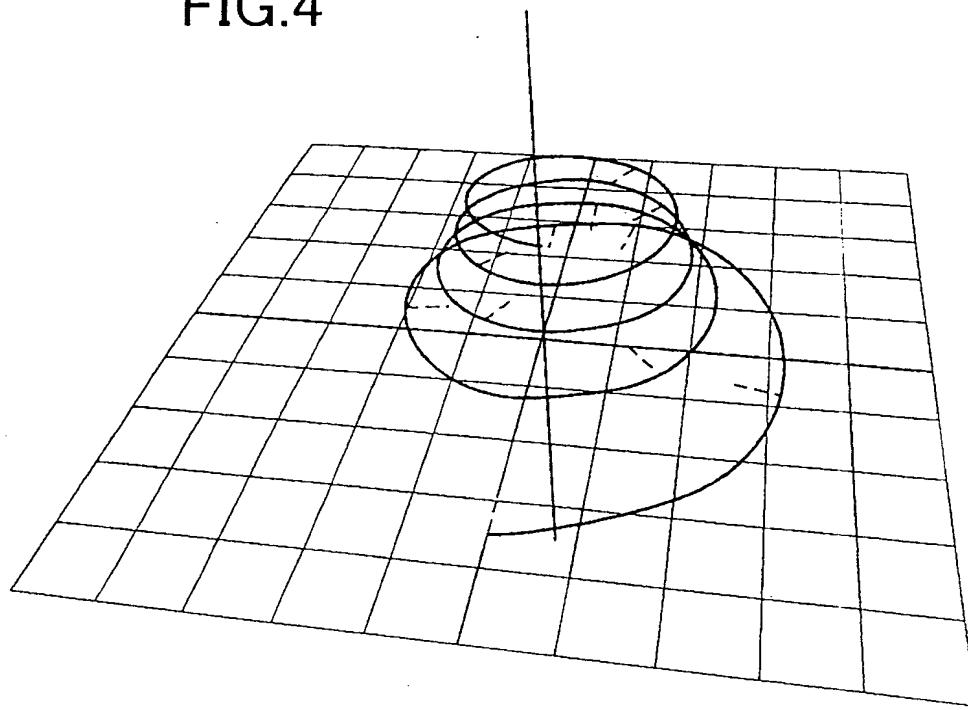


FIG.5

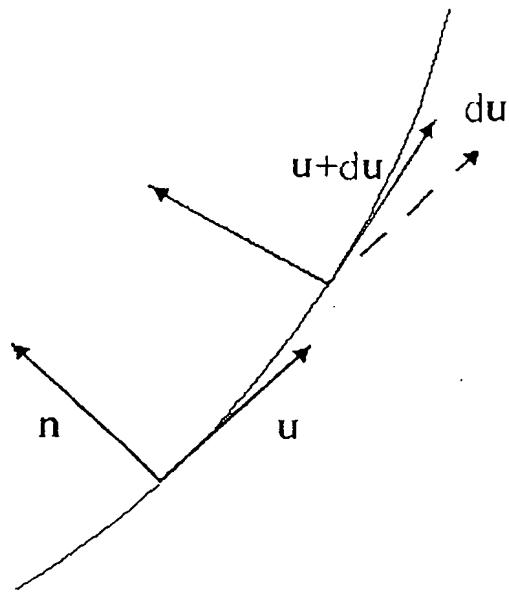


FIG.6

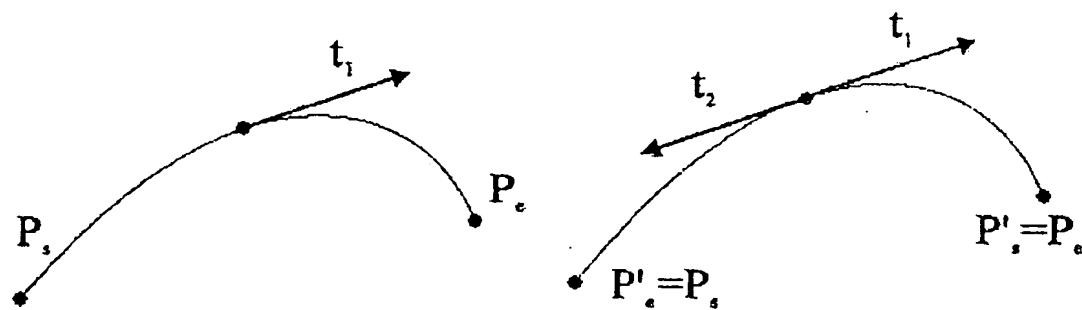


FIG.7

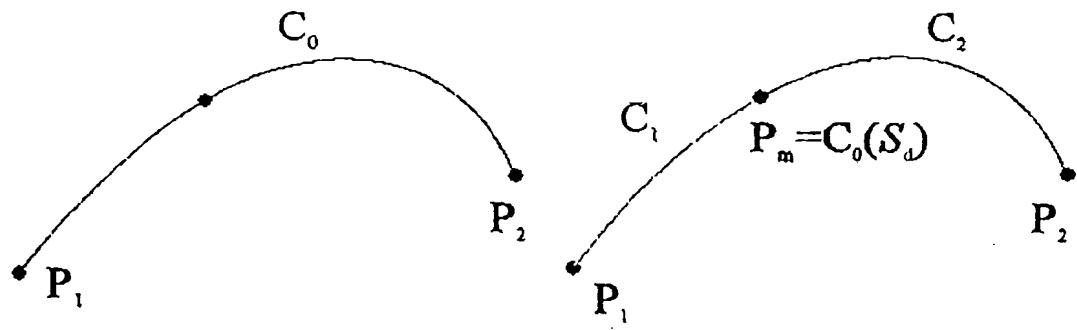


FIG.8

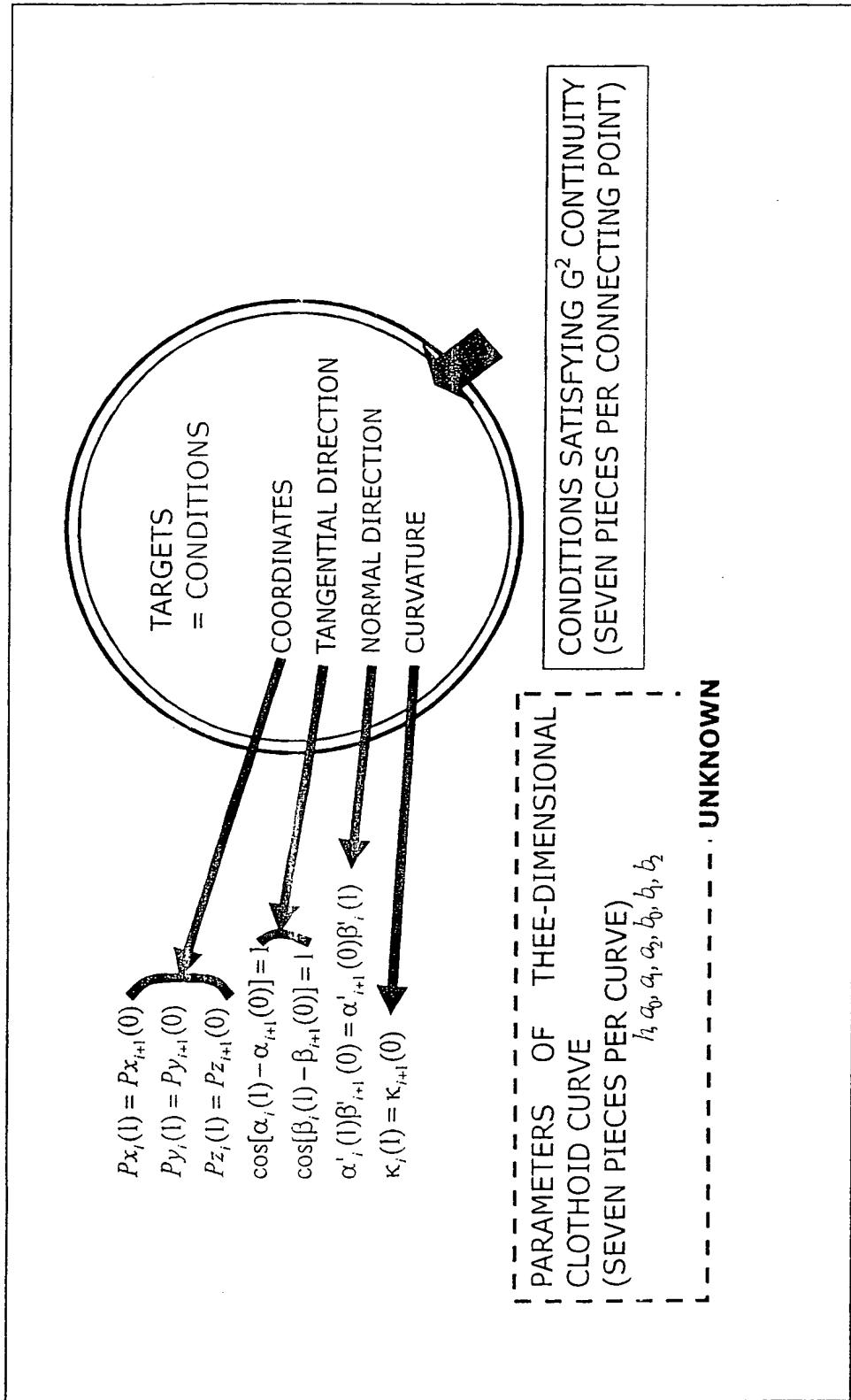


FIG.9

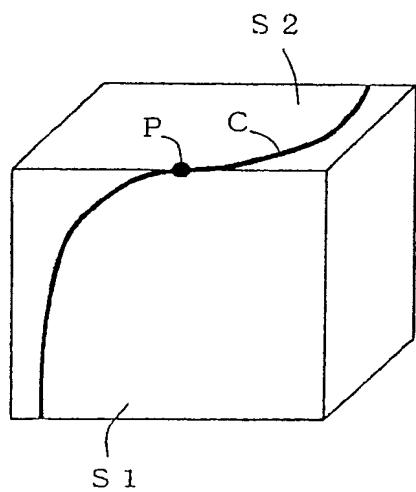


FIG.10

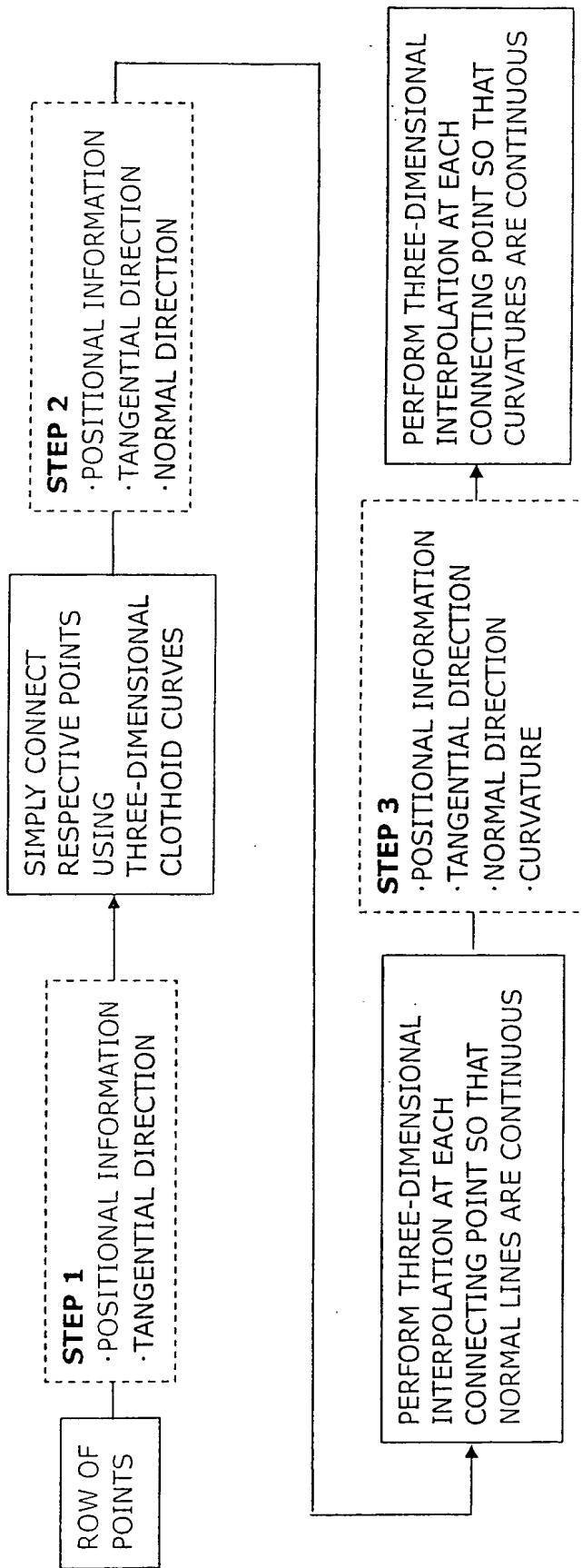


FIG.11

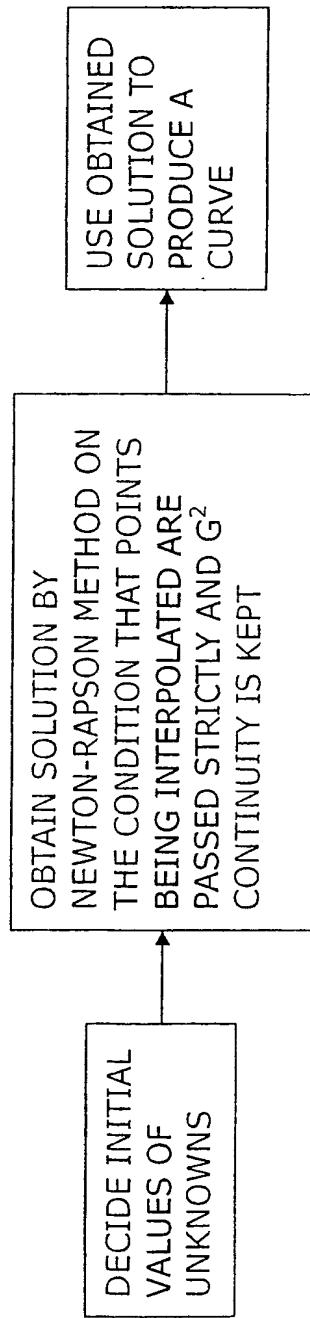


FIG.12

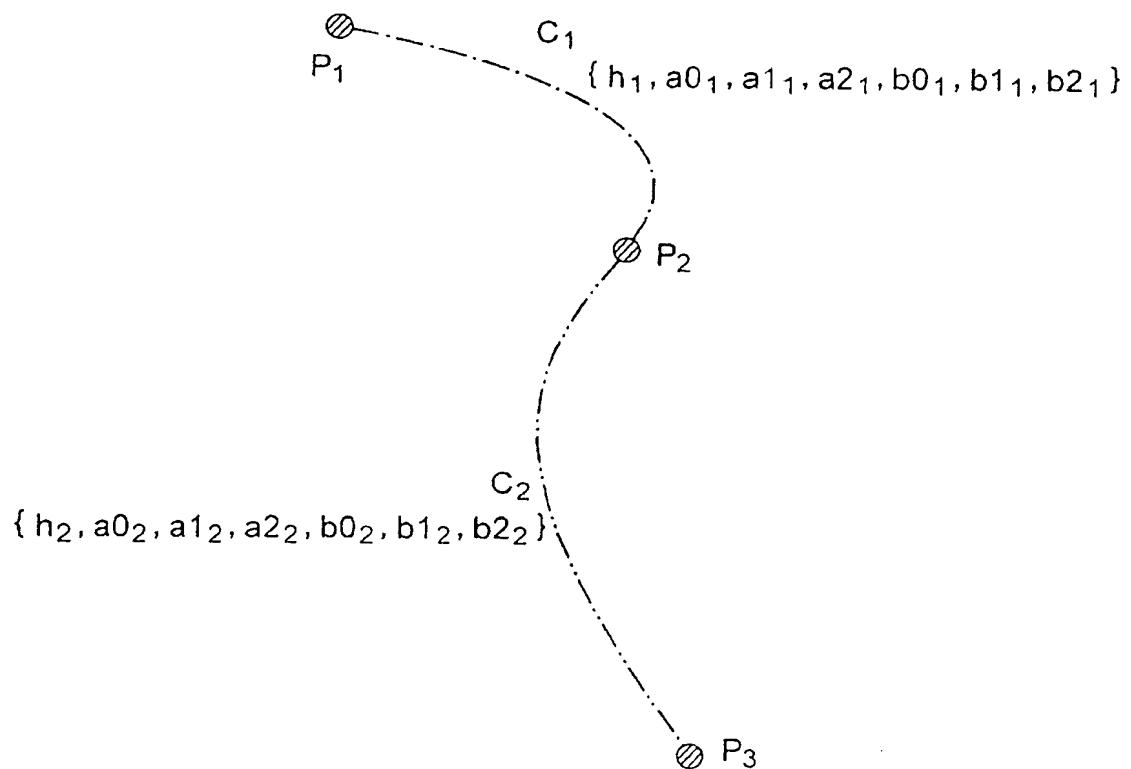


FIG.13

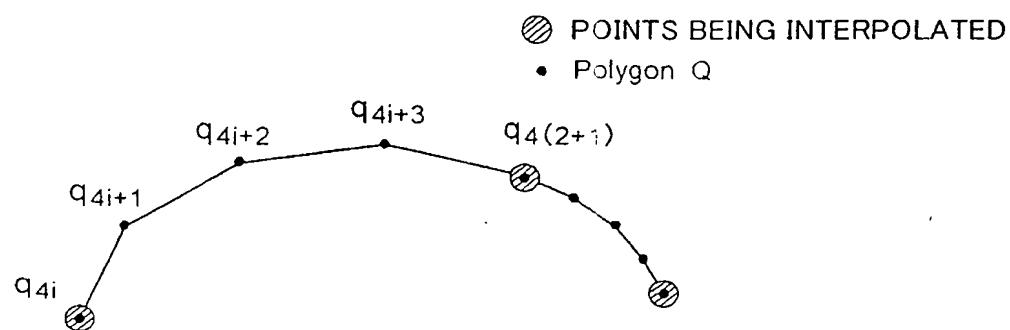


FIG.14

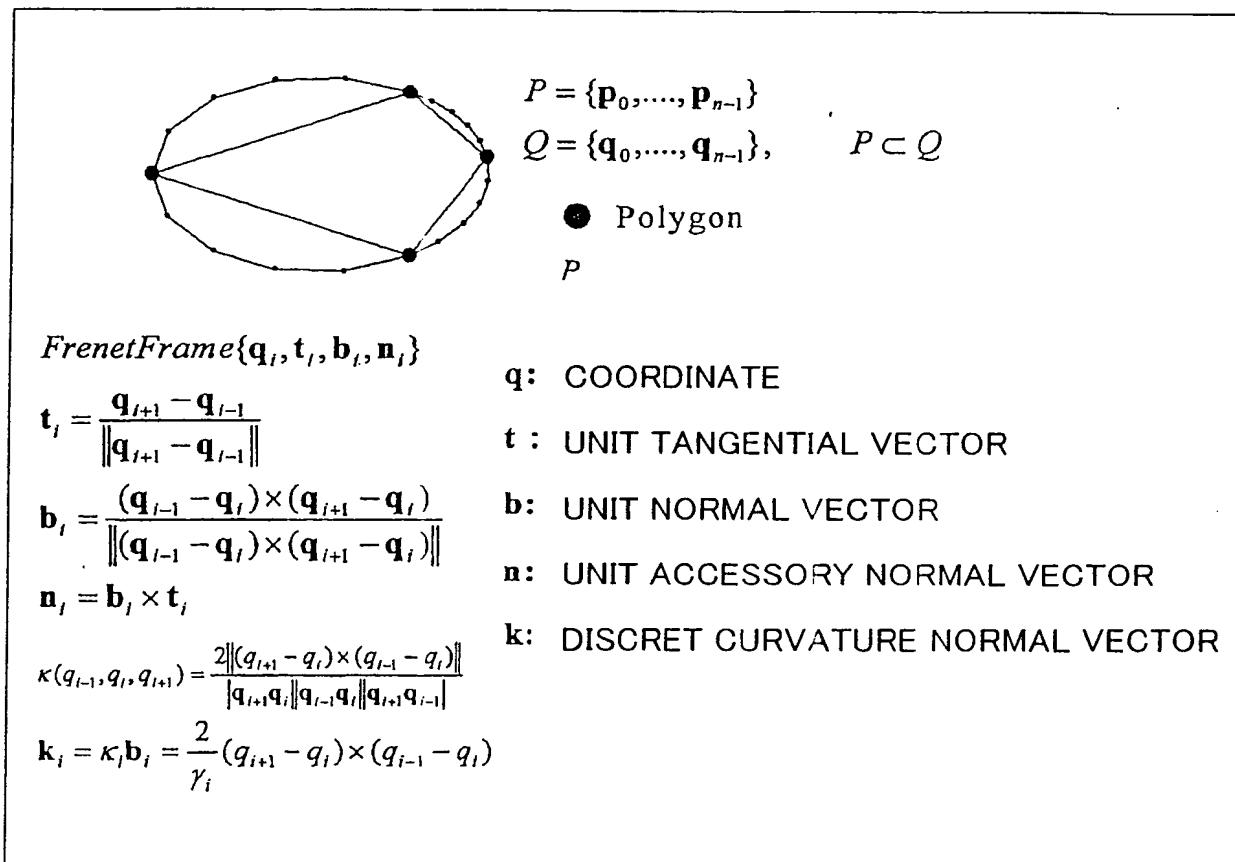


FIG.15

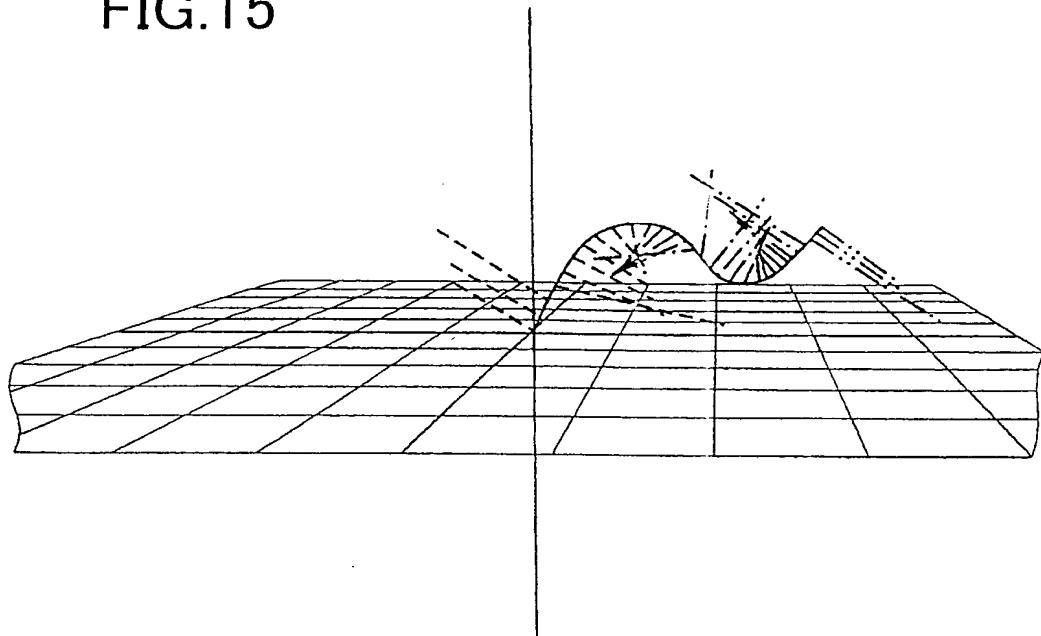


FIG.16

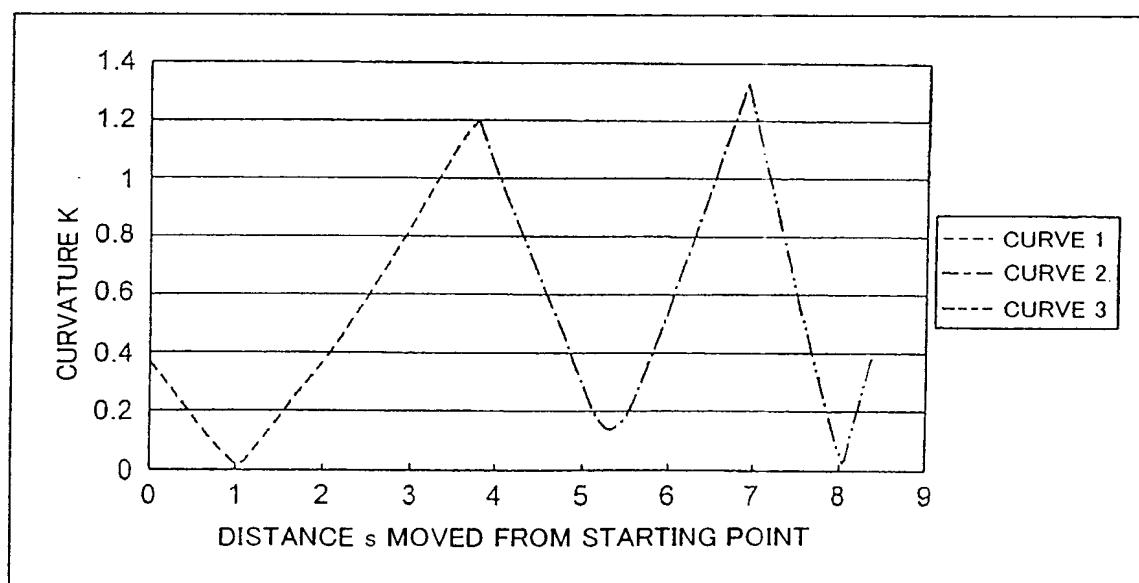


FIG.17

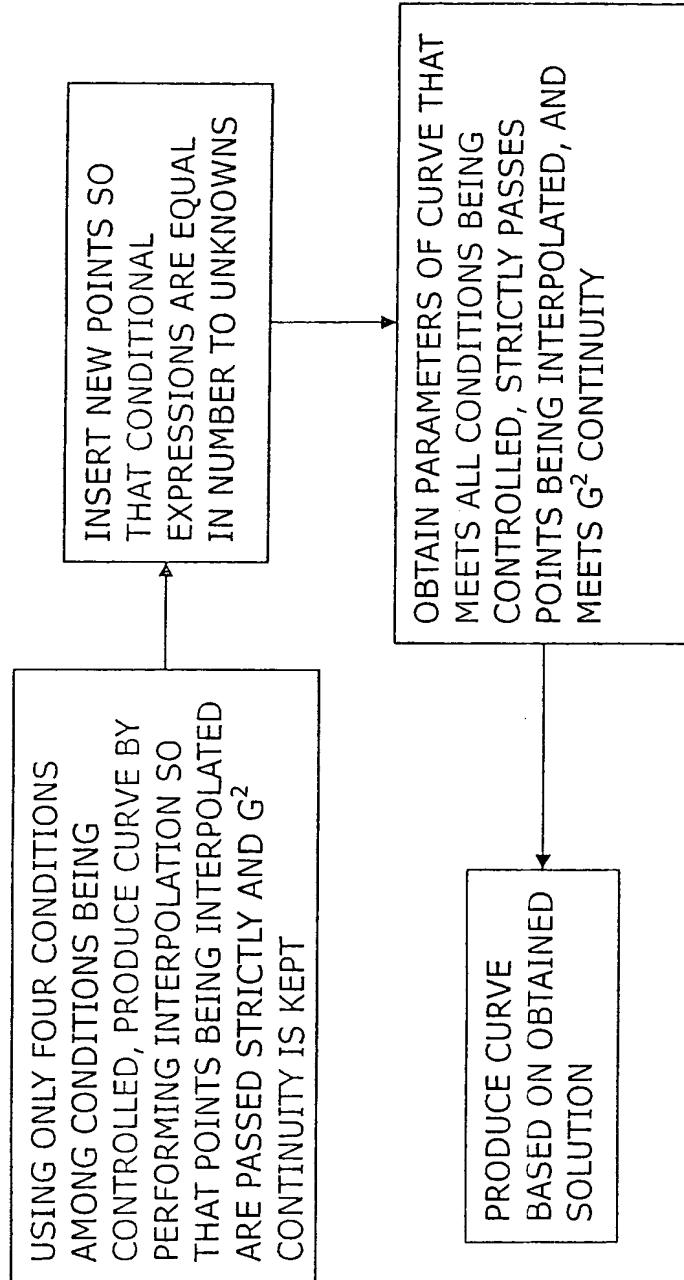


FIG.18

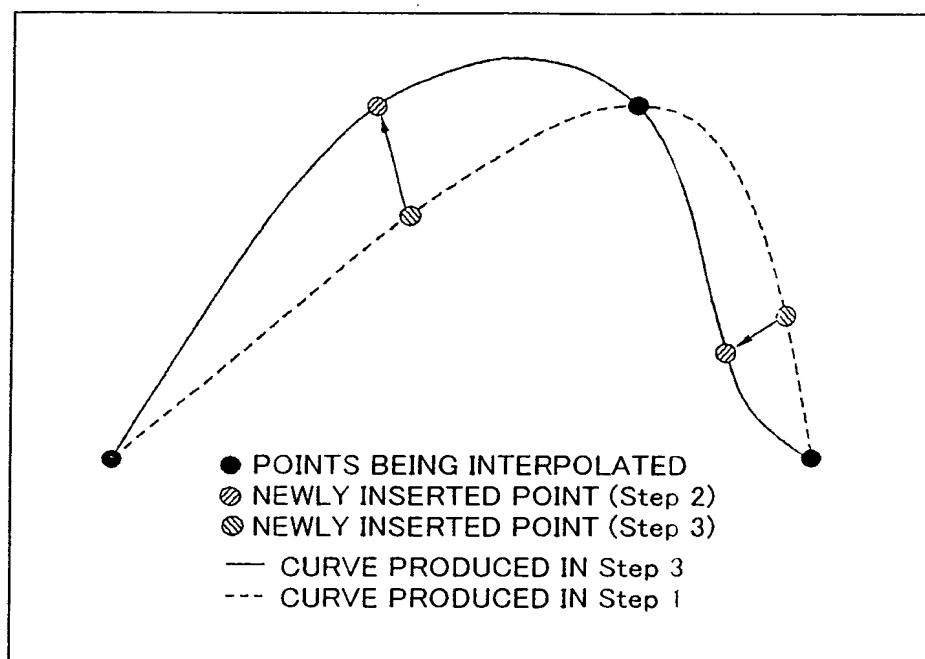


FIG.19

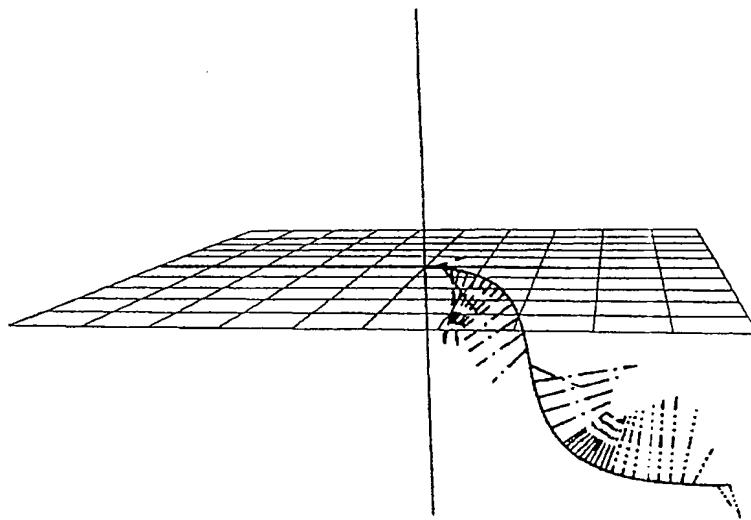


FIG.20

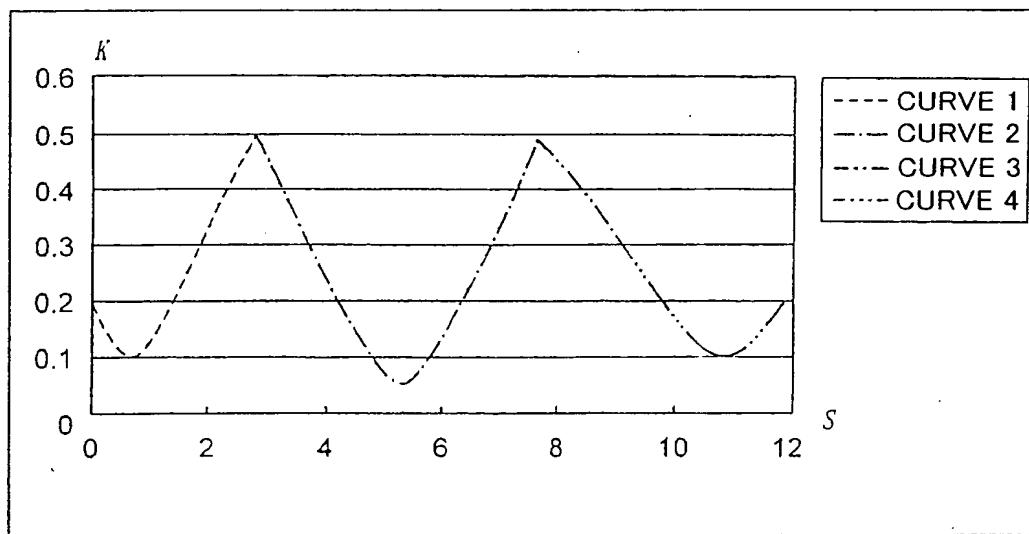


FIG.21

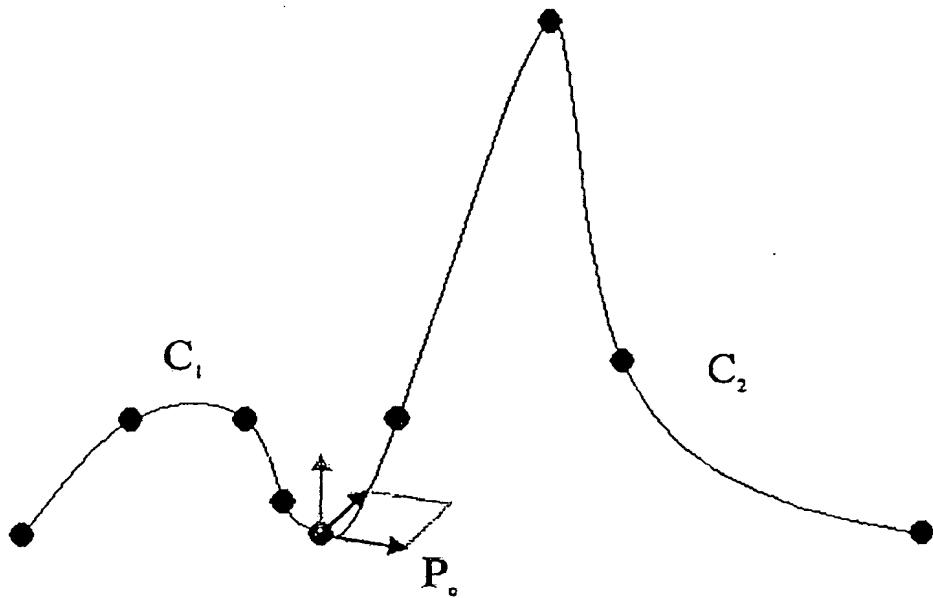


FIG.22

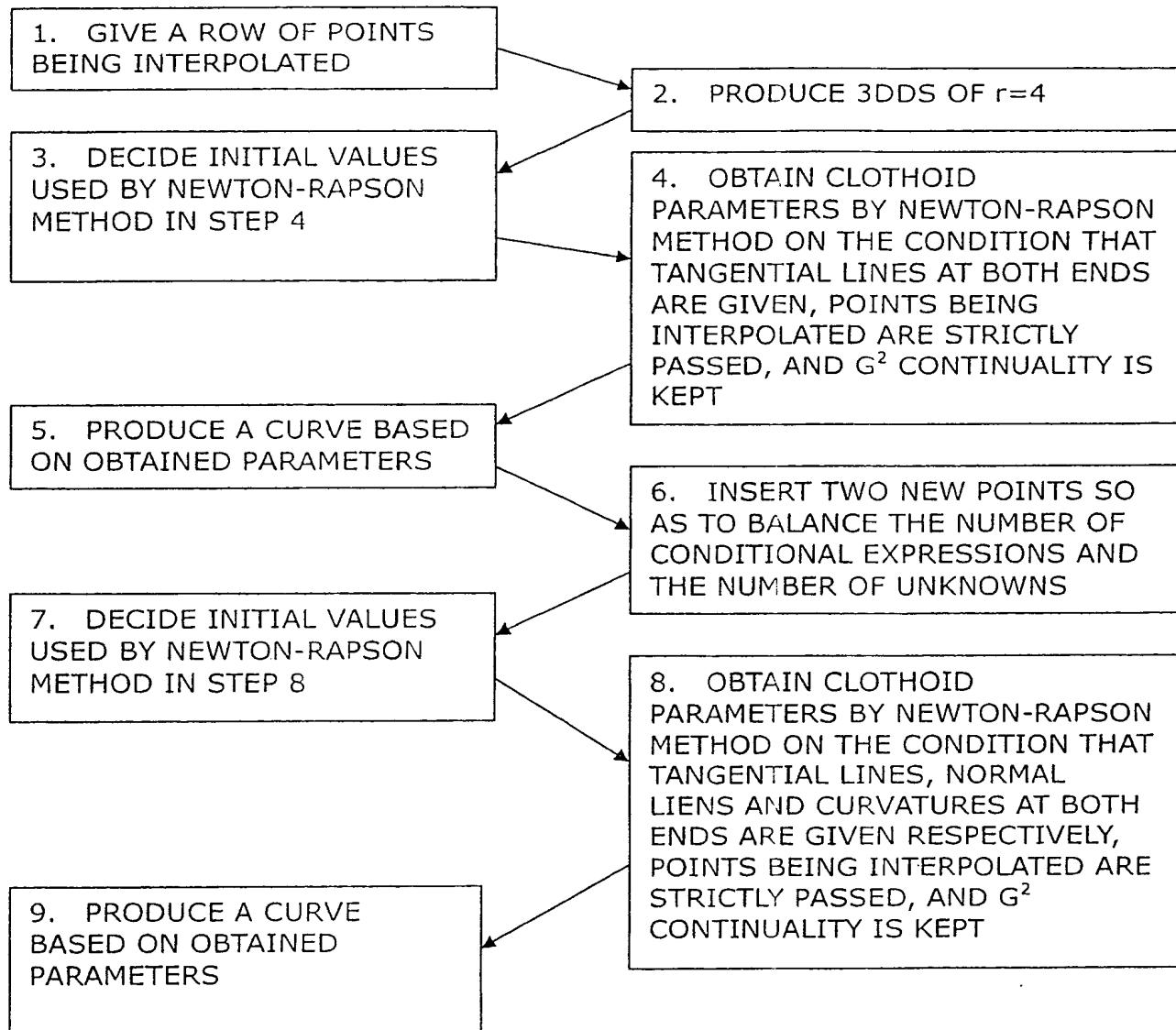


FIG.23

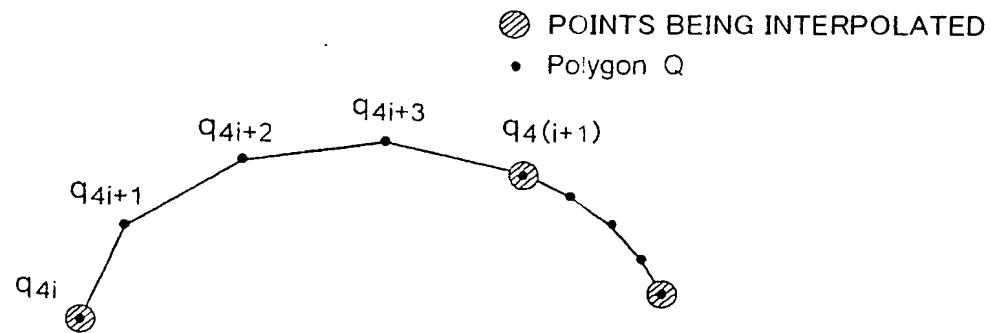


FIG.24

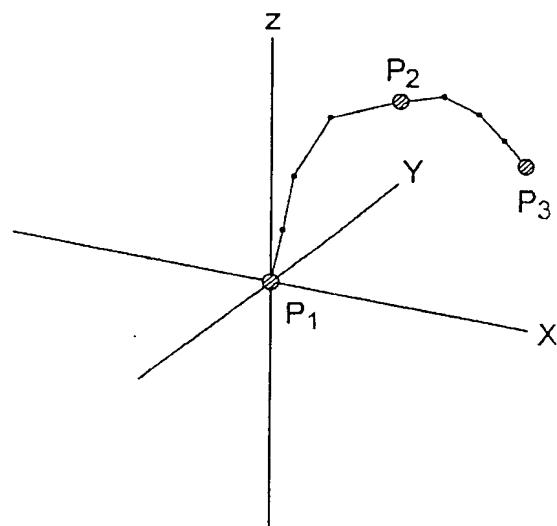


FIG.25

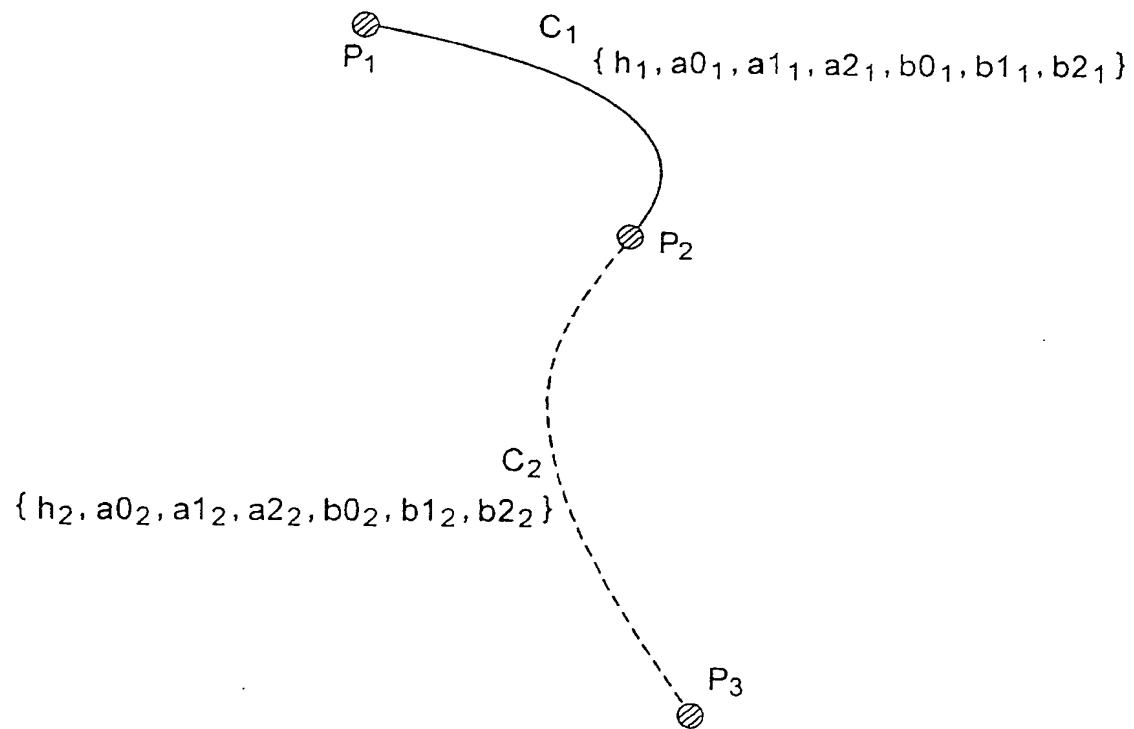


FIG.26

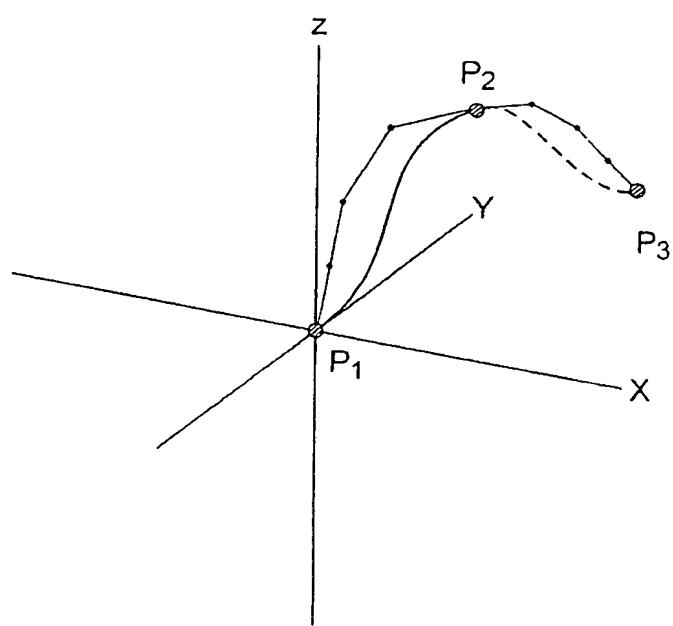


FIG.27

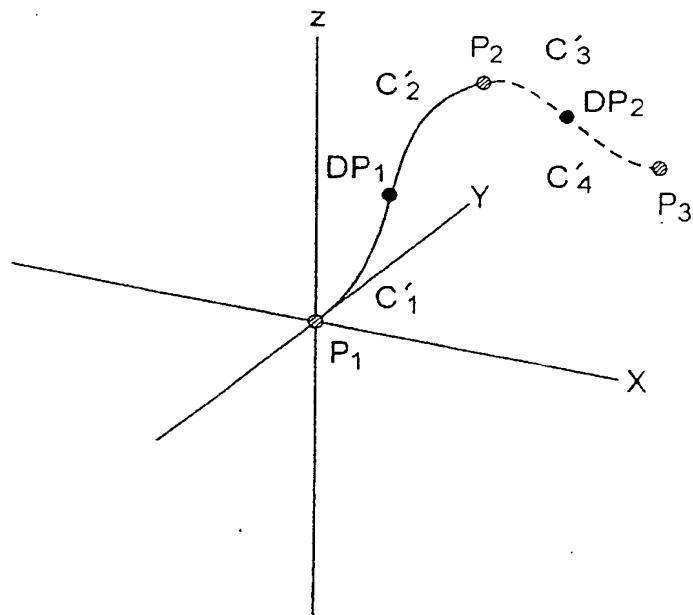


FIG.28

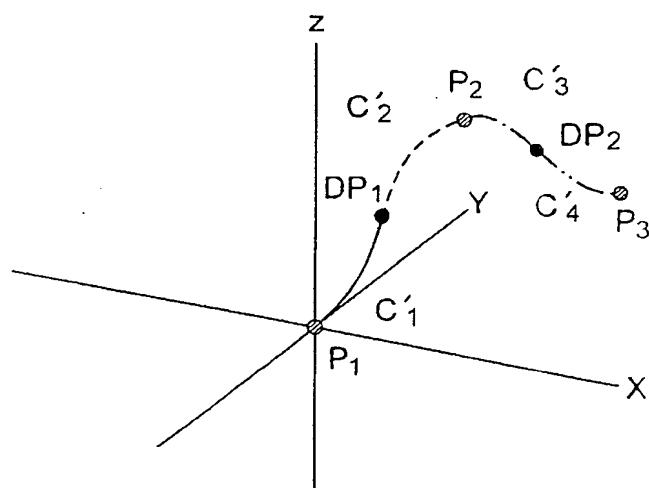


FIG.29

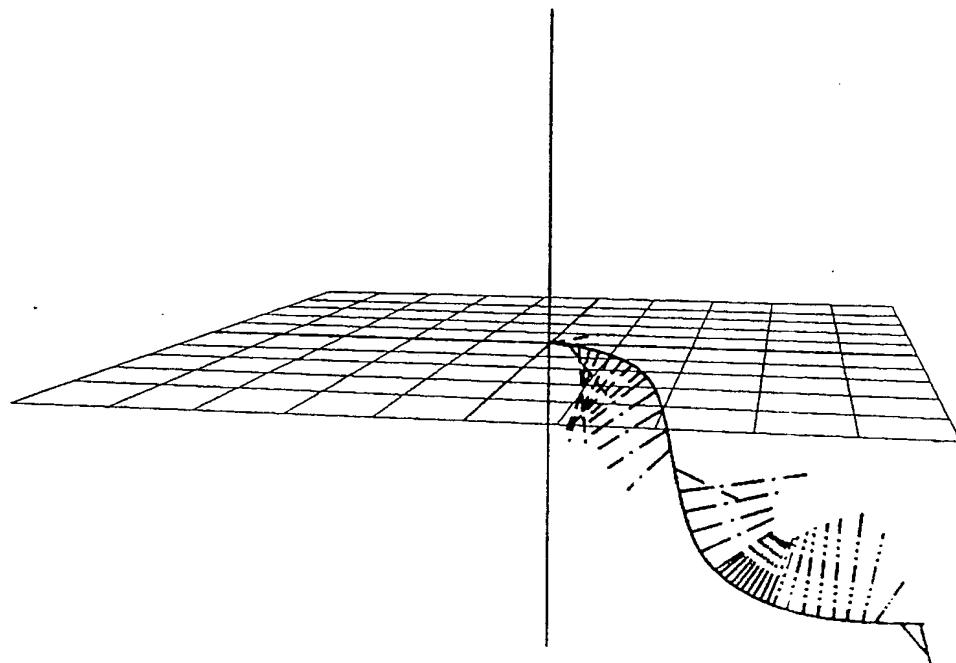


FIG.30

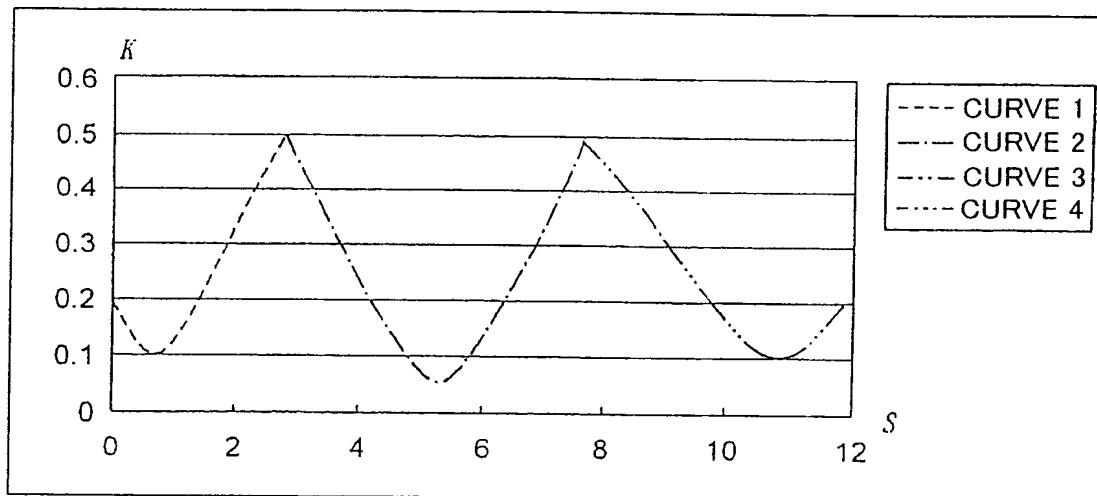


FIG.31

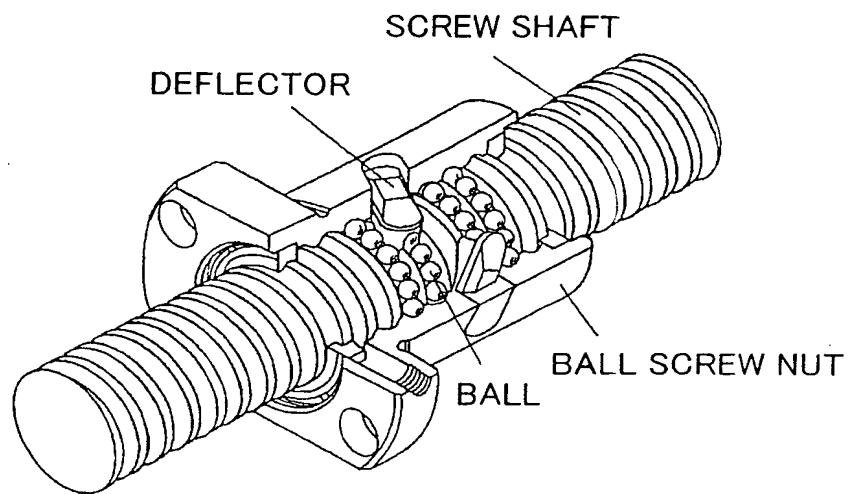


FIG.32

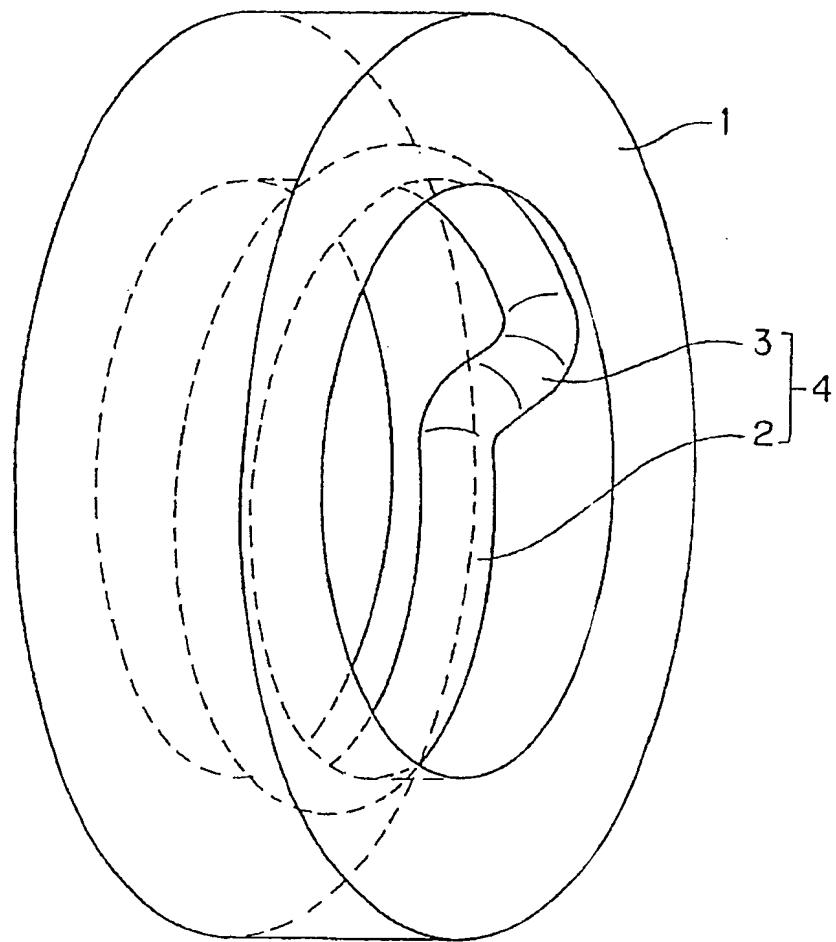


FIG.33A

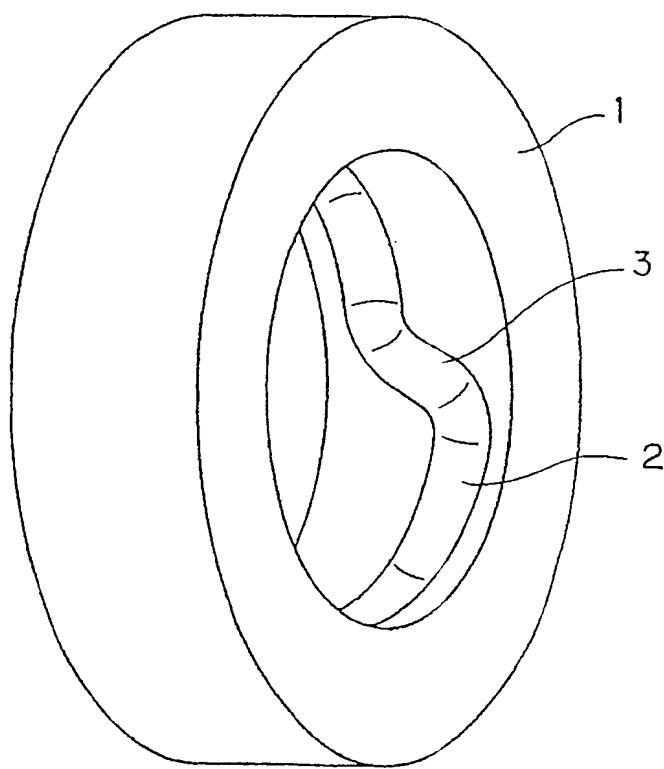


FIG.33B

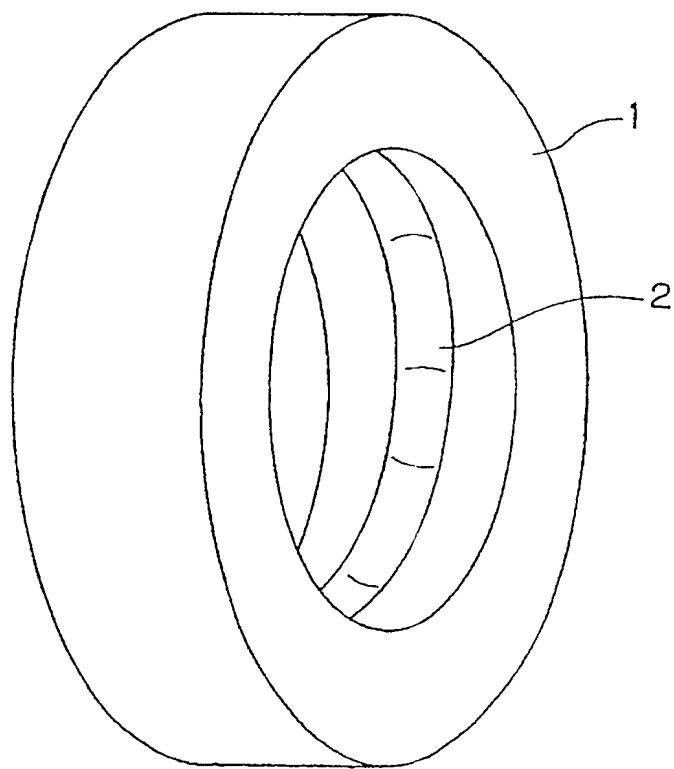


FIG. 34

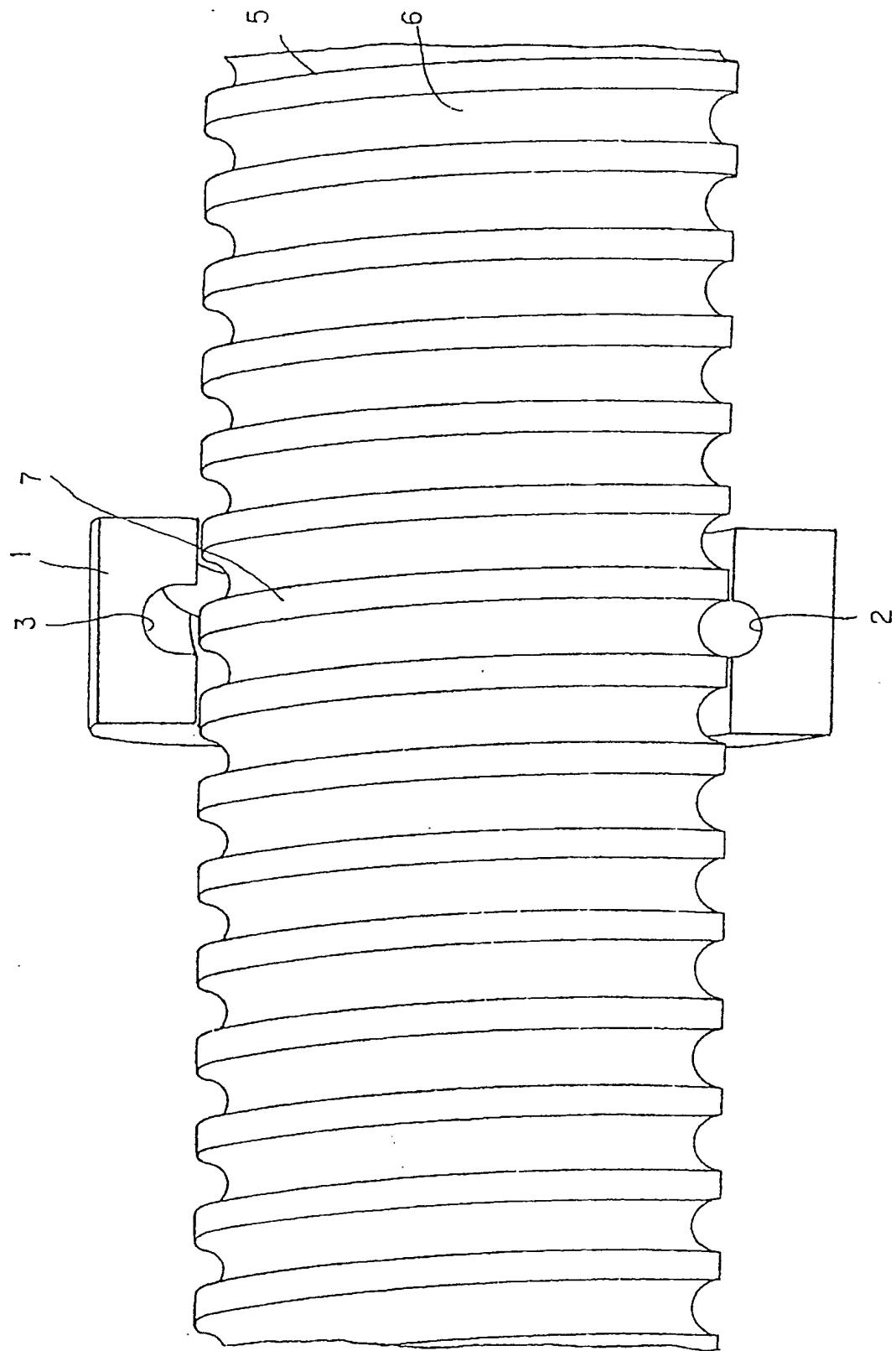


FIG.35

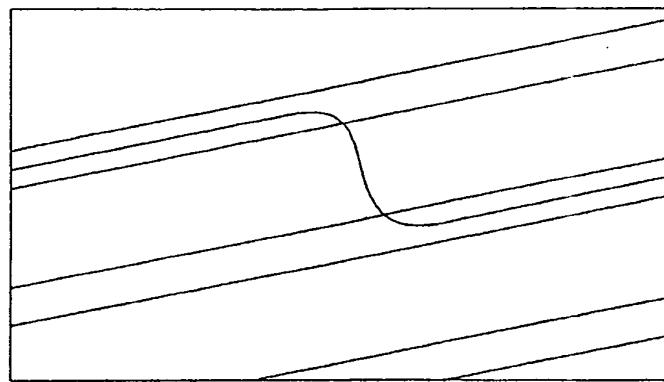


FIG.36

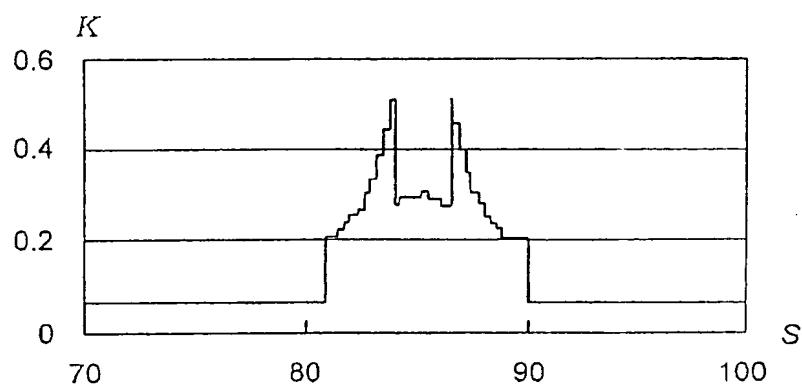


FIG.37

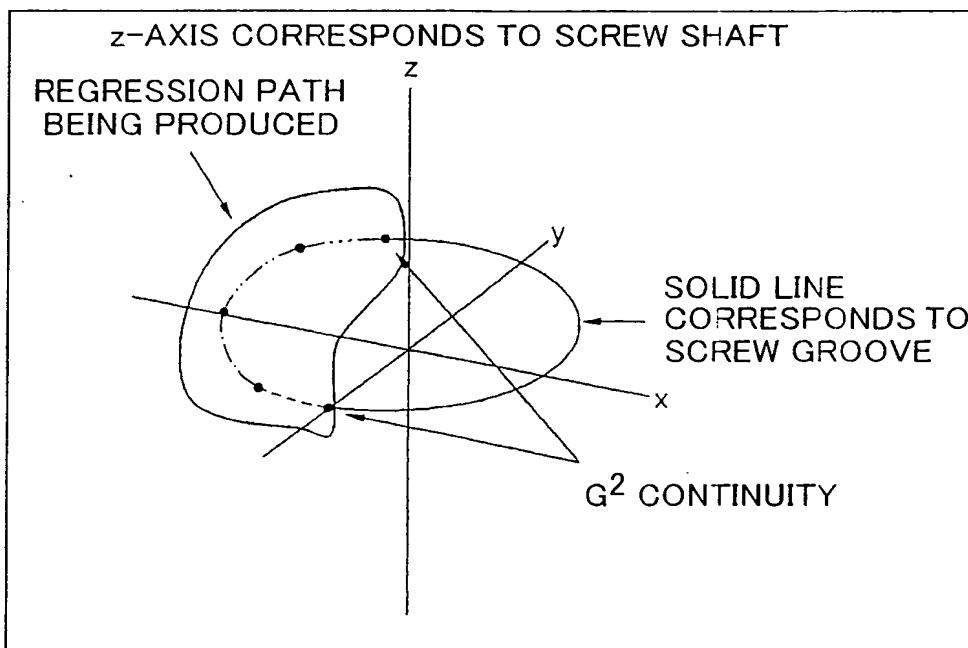


FIG.38

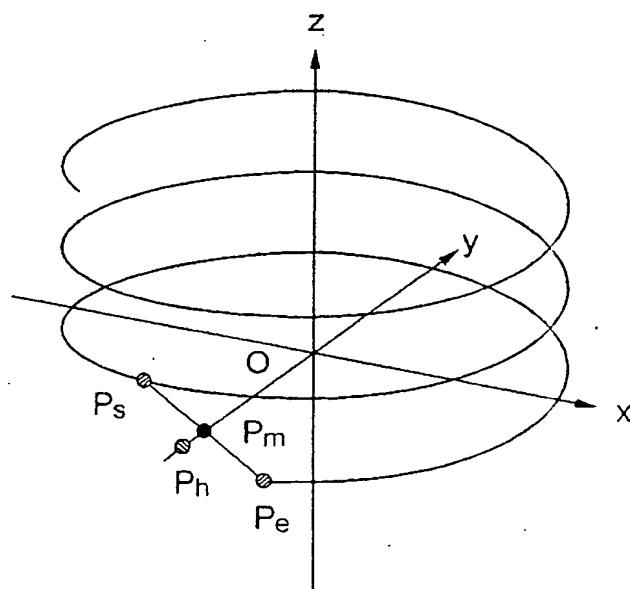


FIG.39

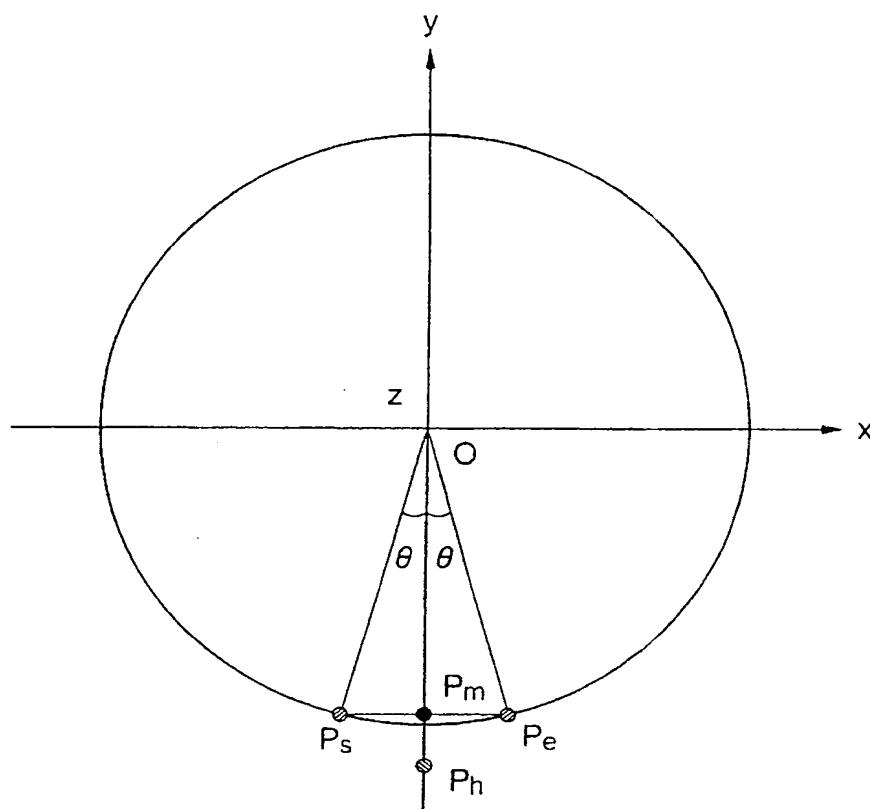


FIG.40

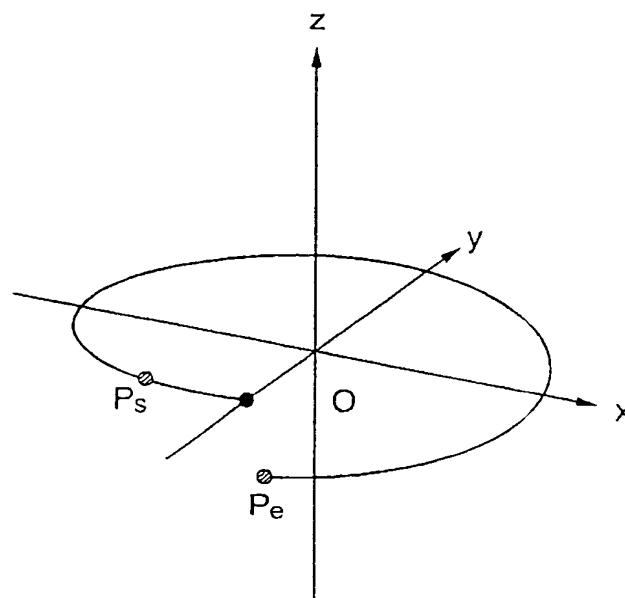


FIG.41

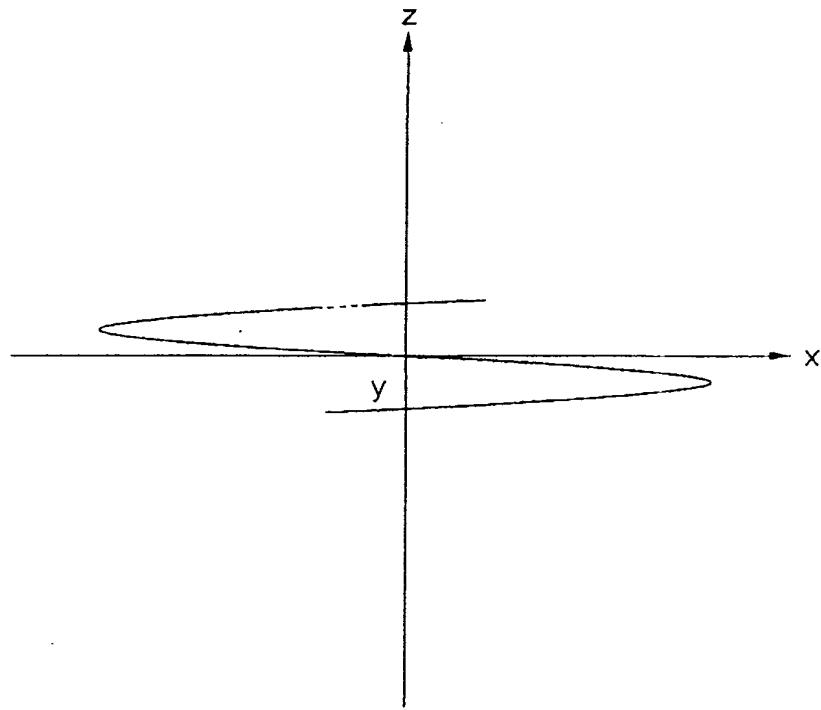
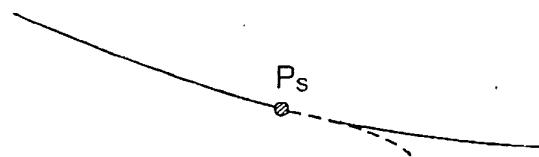


FIG.42



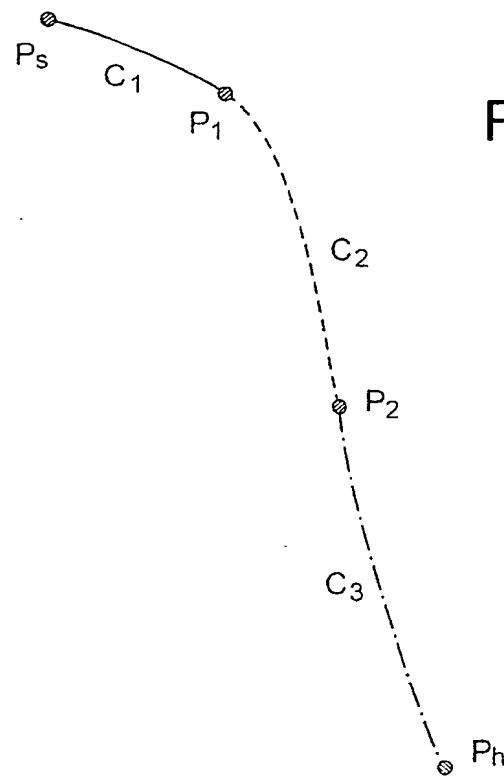


FIG.44

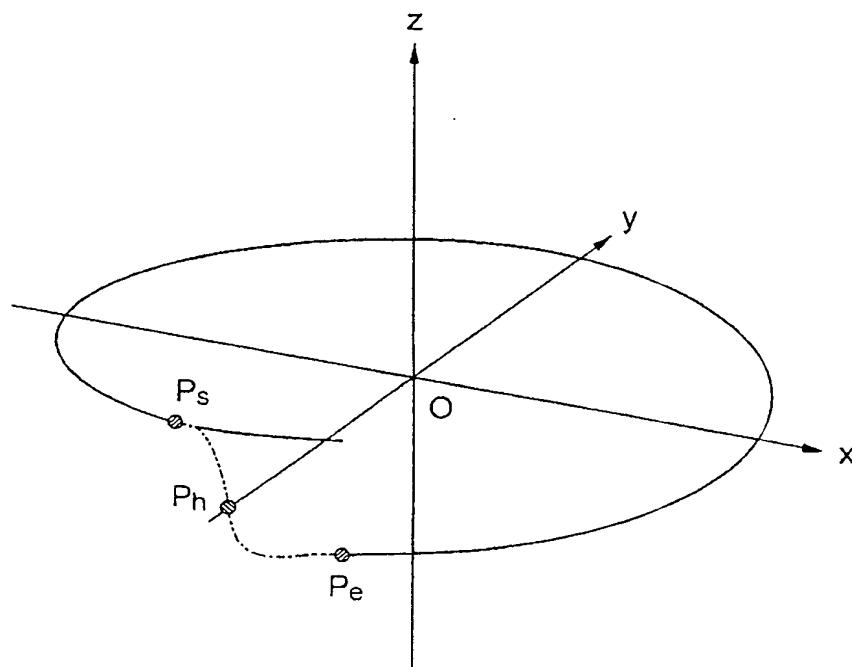


FIG.45

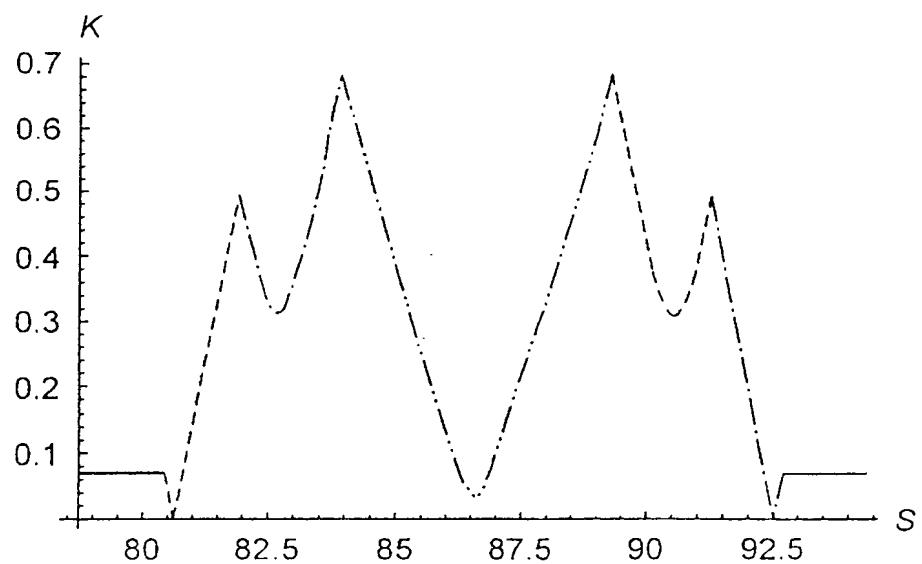


FIG.46

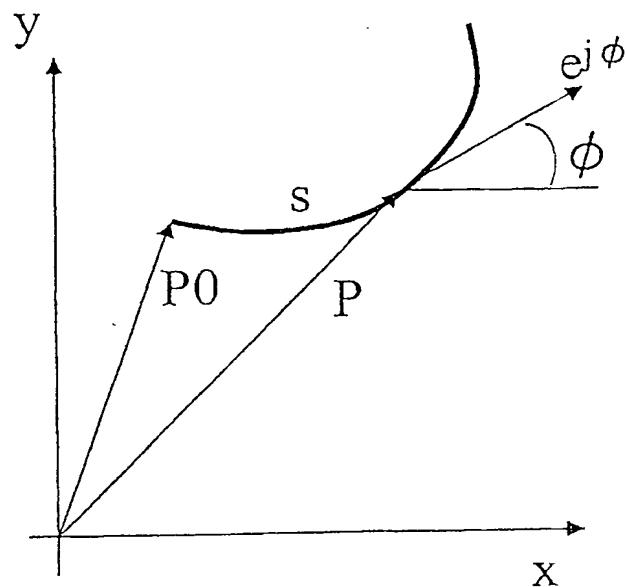


FIG.47

CLOTHOID

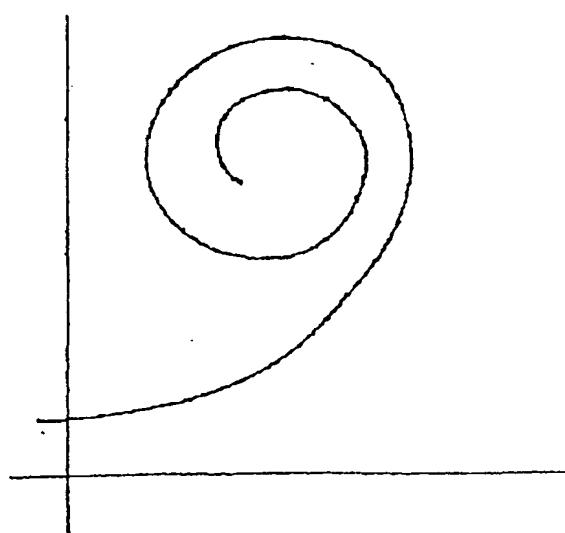


FIG.48

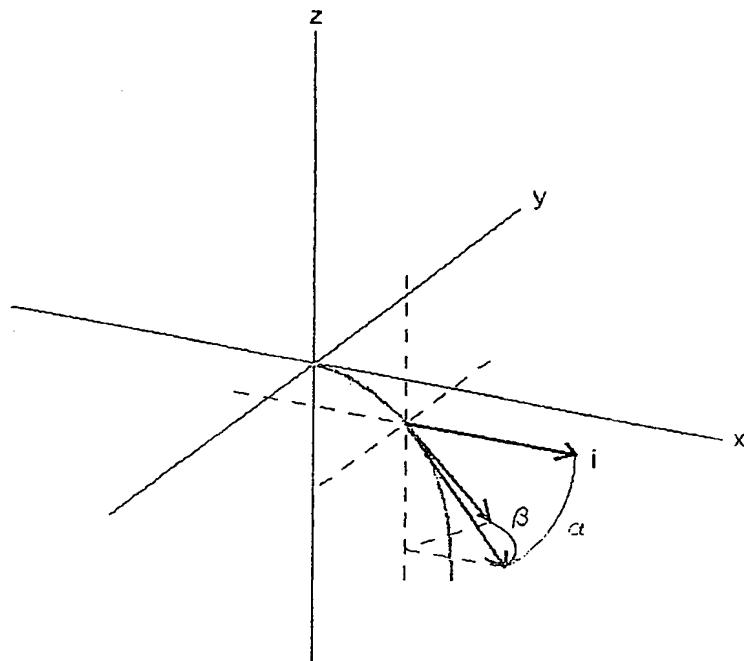


FIG.49

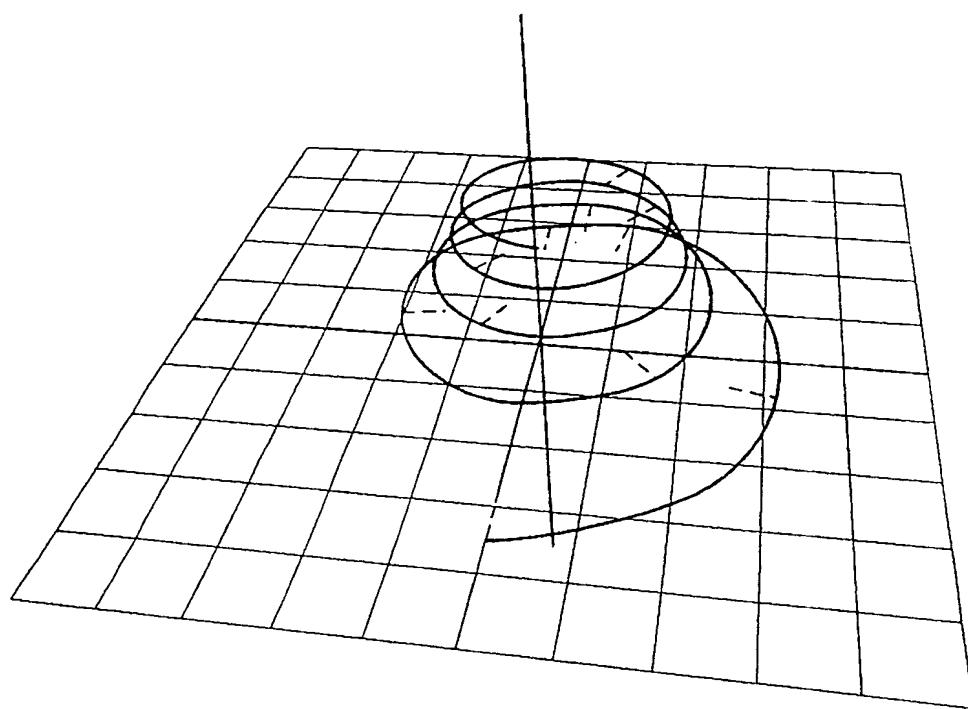


FIG.50

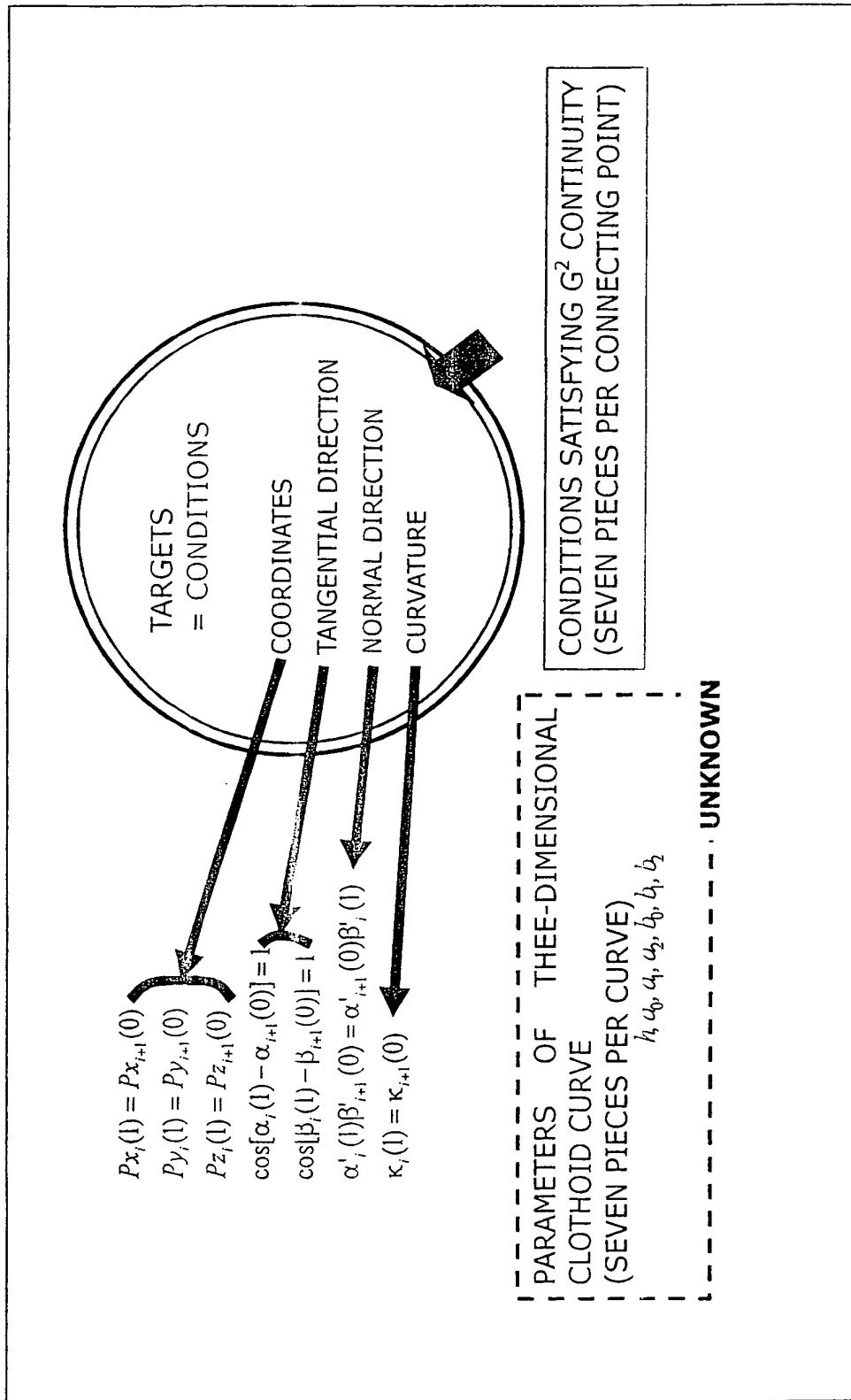


FIG.51

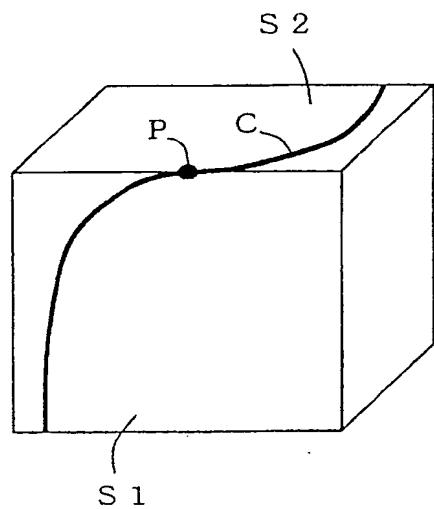


FIG.52

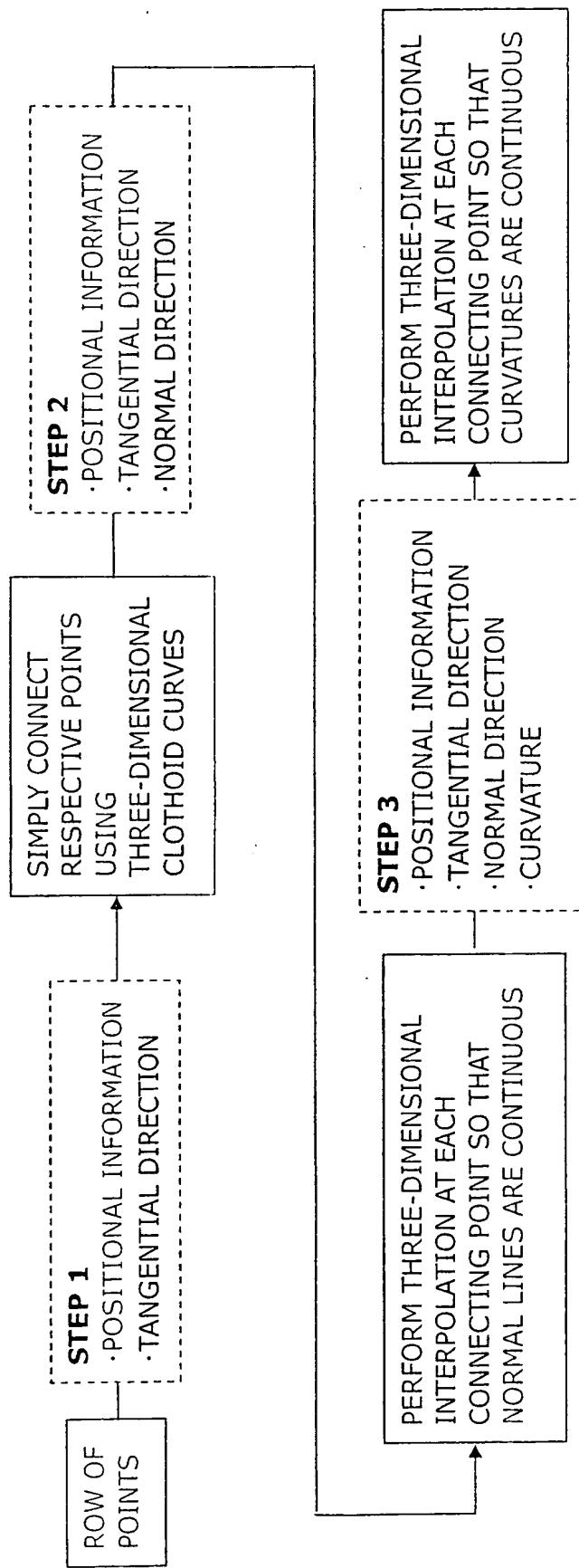


FIG.53

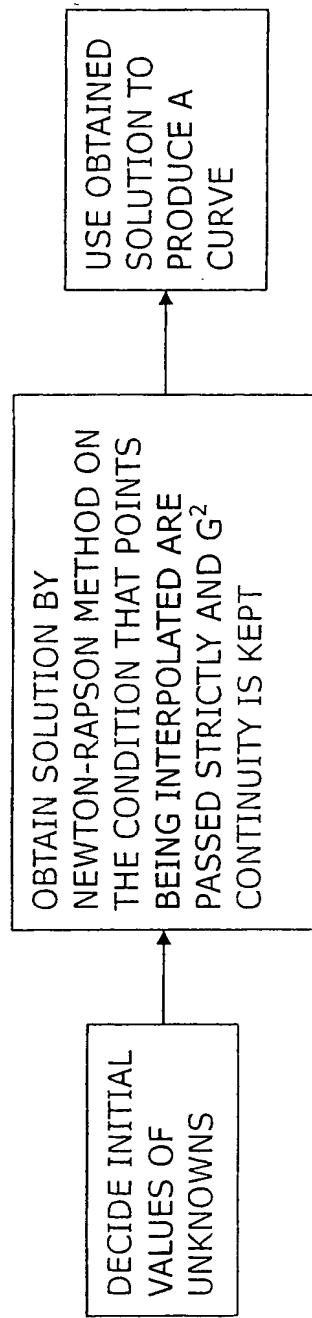


FIG.54

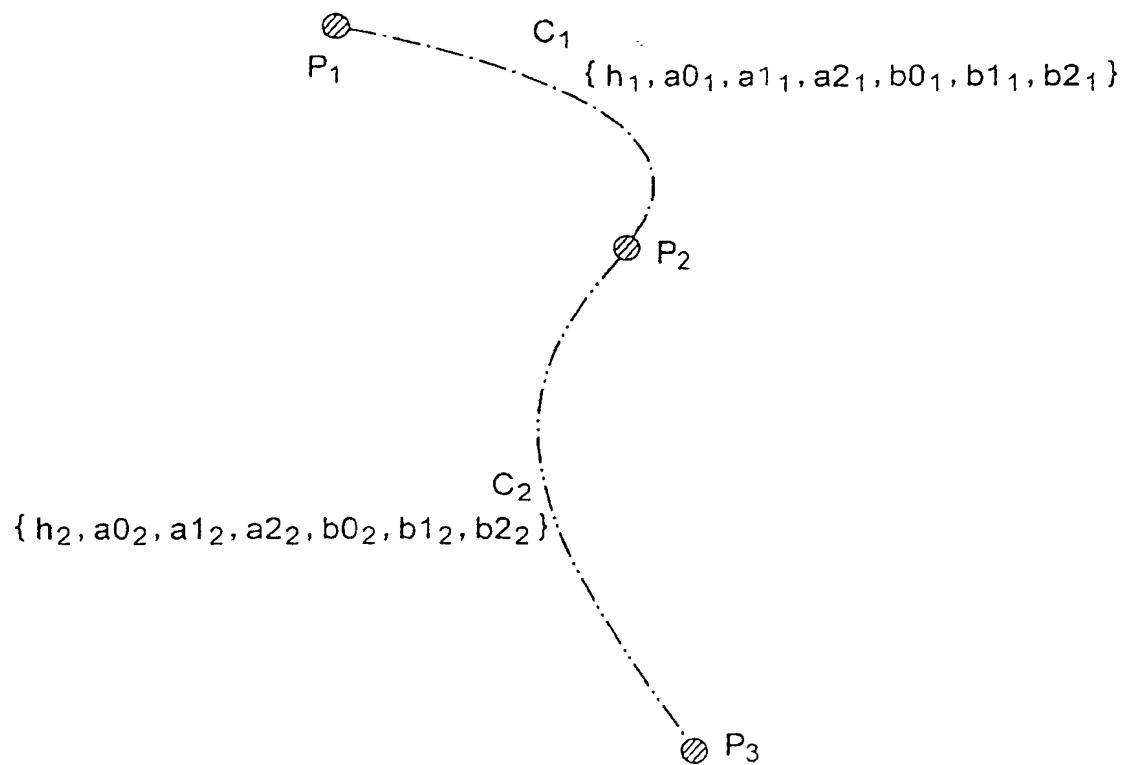


FIG.55

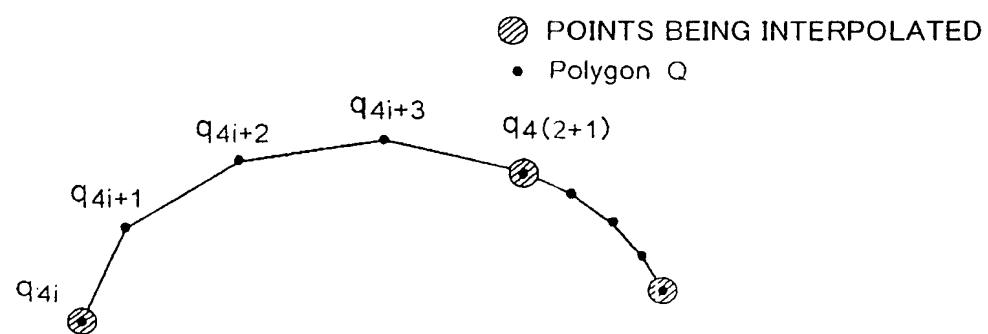


FIG.56

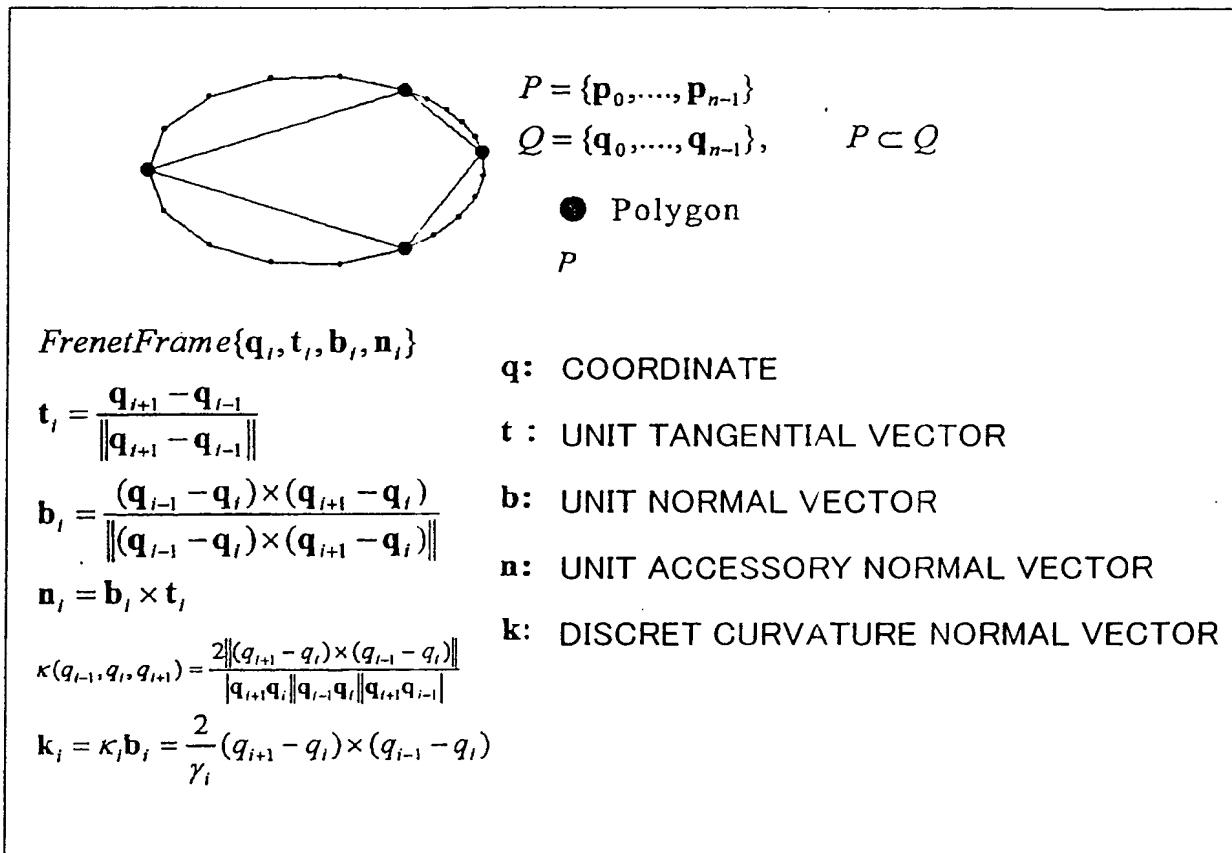


FIG.57

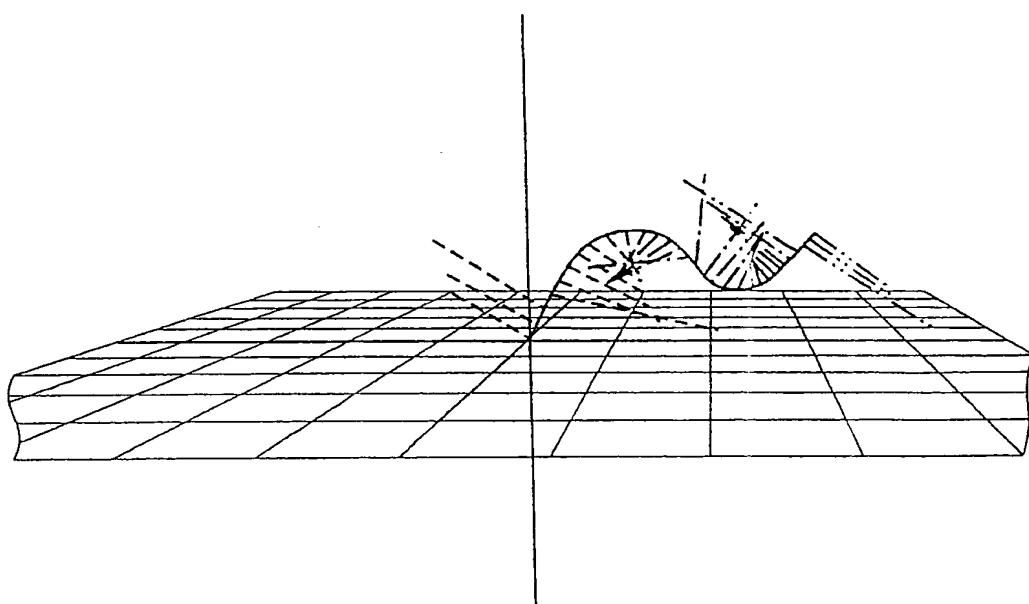


FIG.58

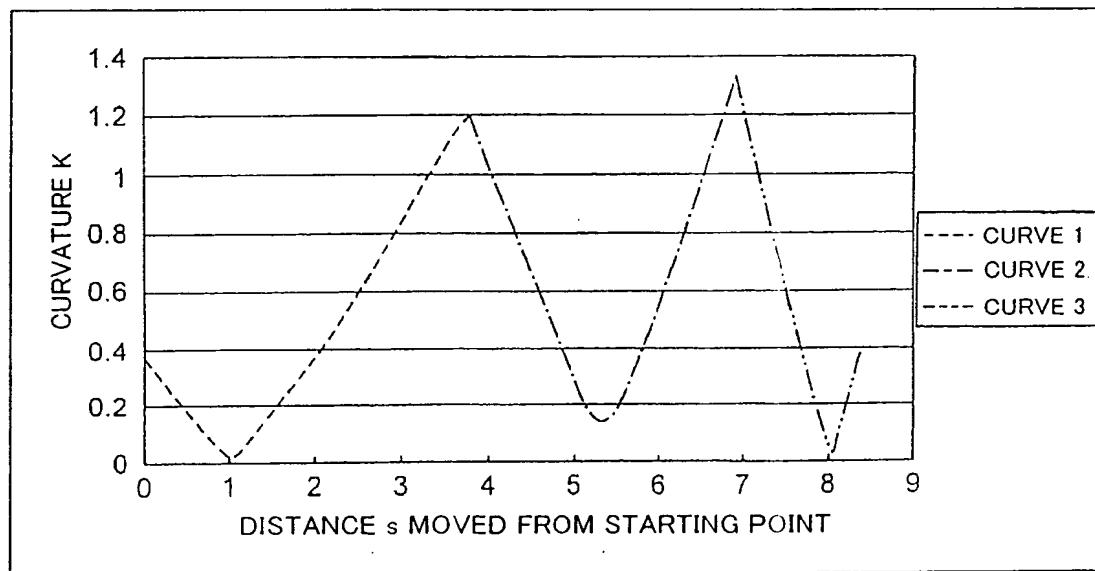


FIG.59

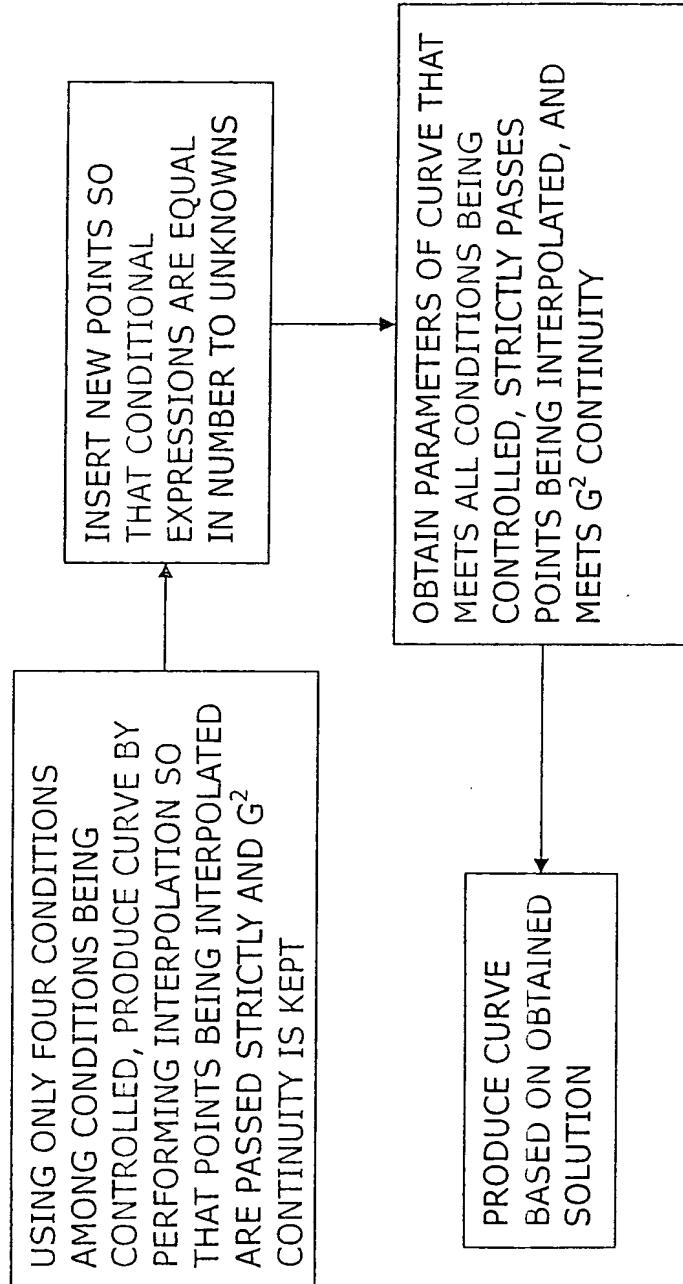


FIG.60

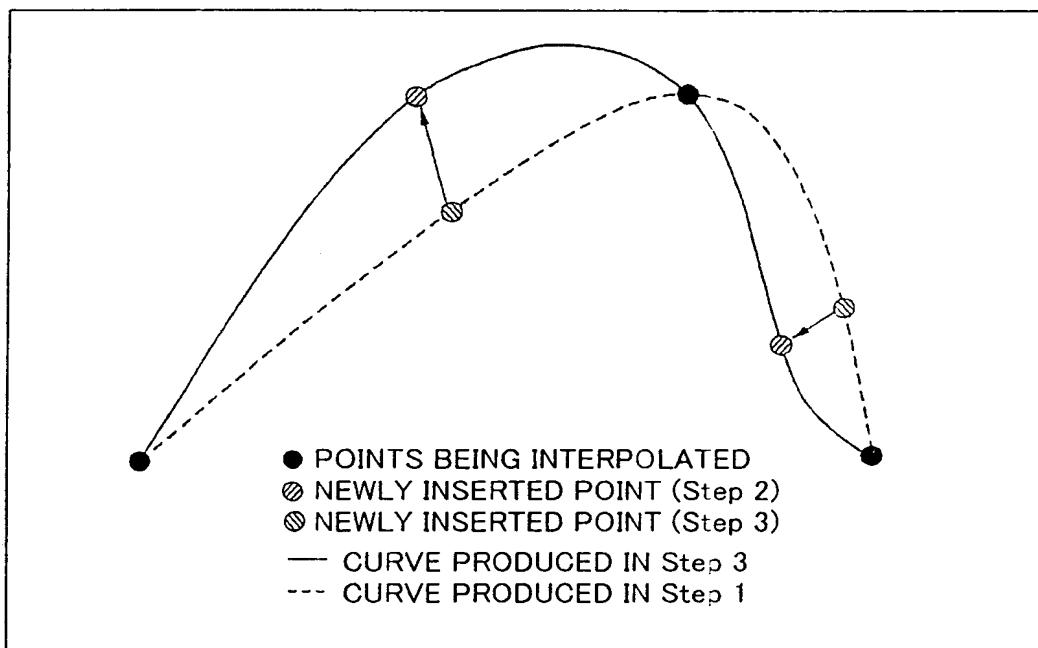


FIG.61

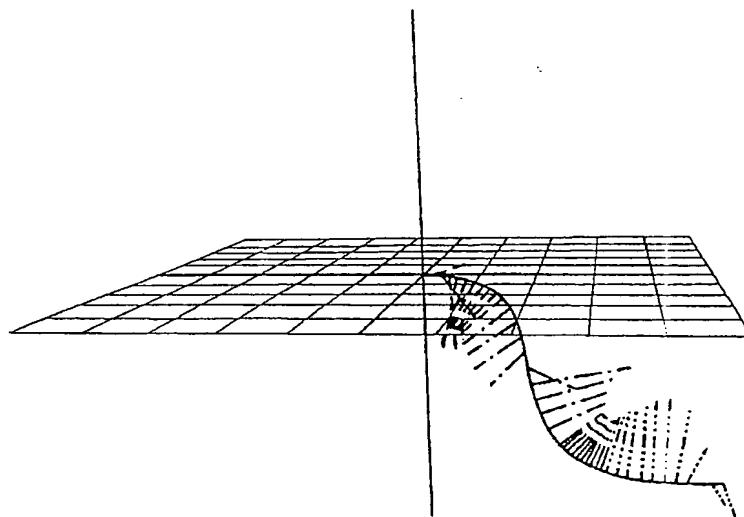


FIG.62

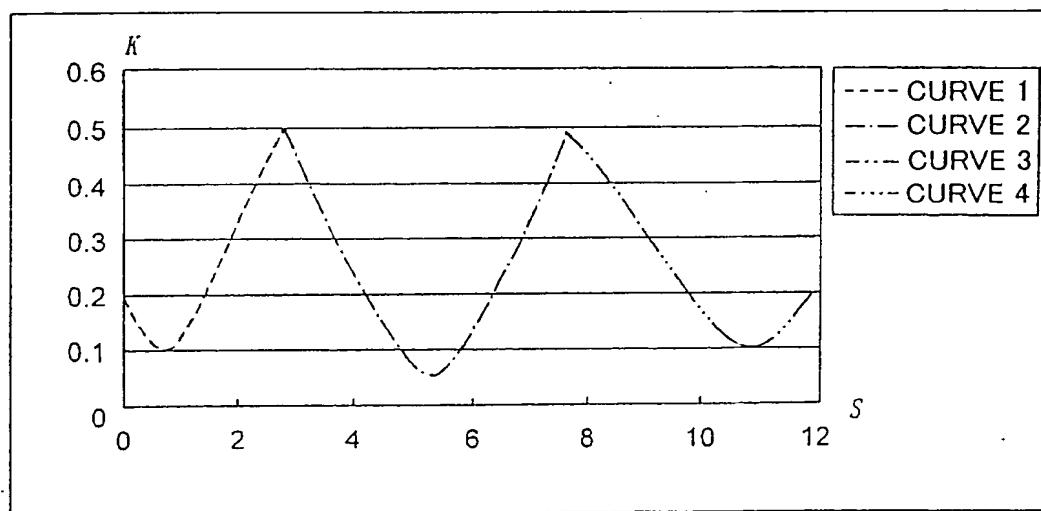


FIG.63

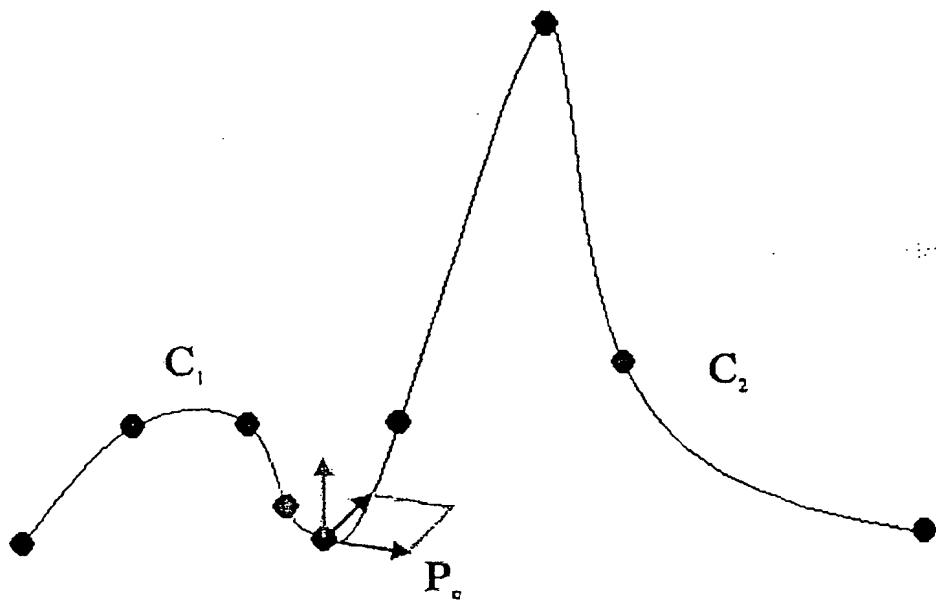


FIG.64

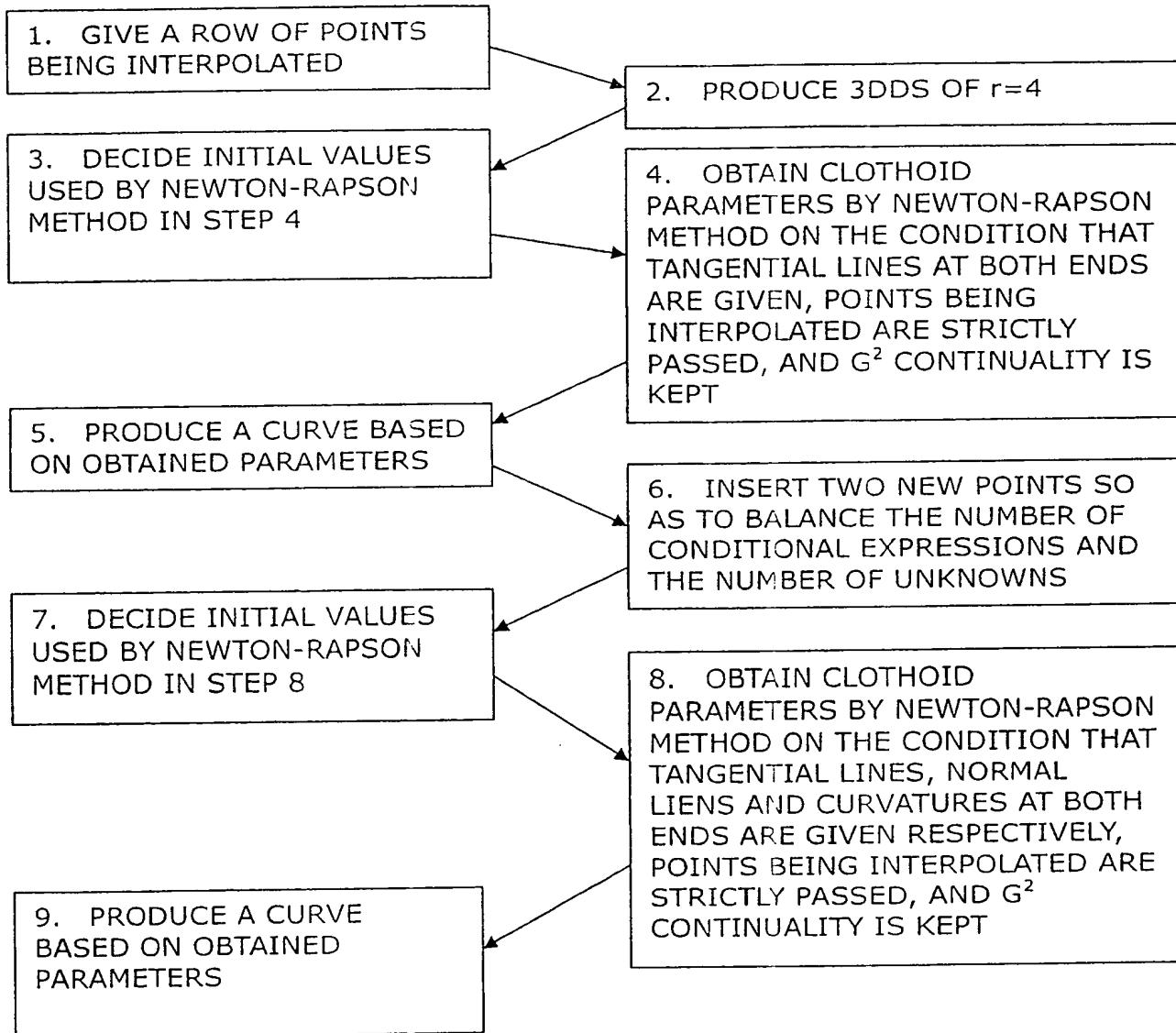


FIG.65

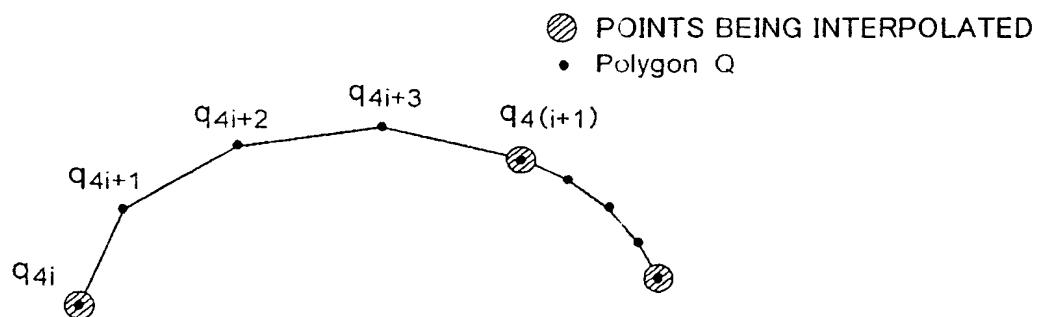


FIG.66

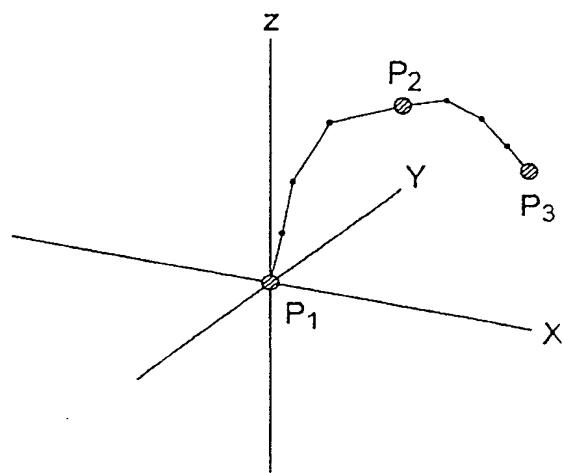


FIG.67

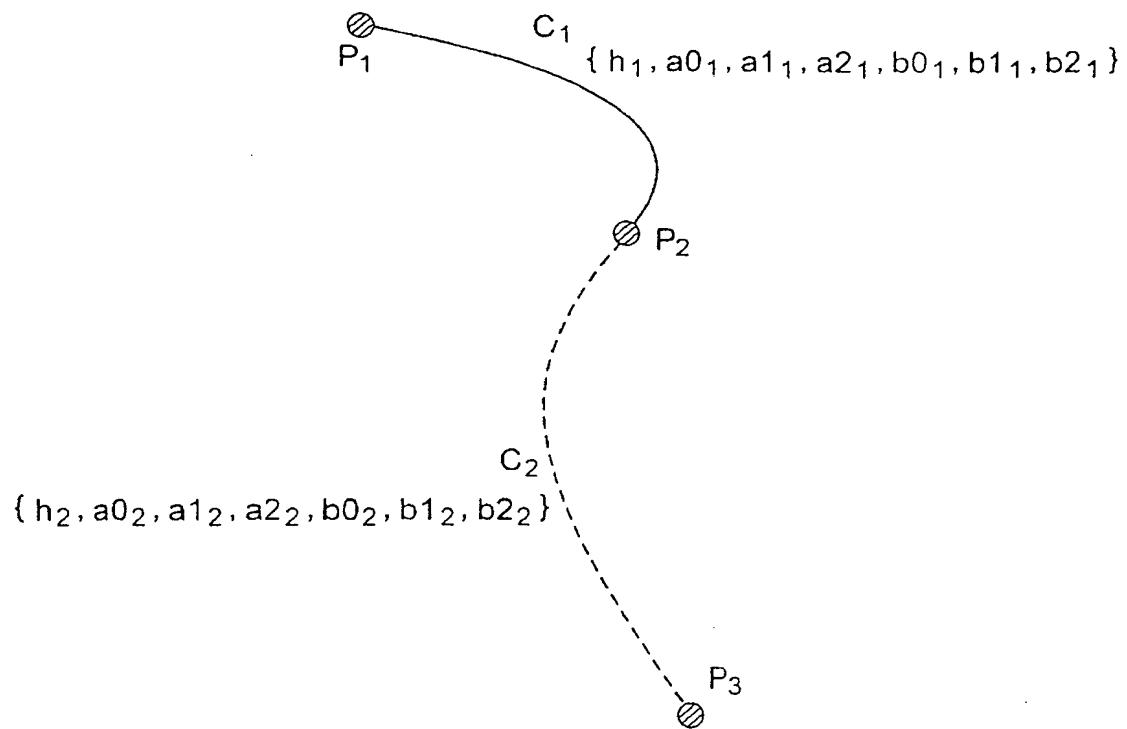


FIG.68

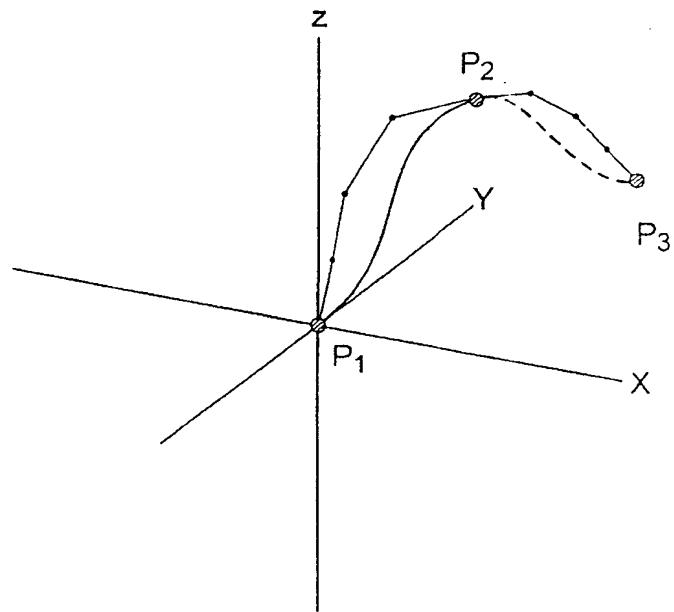


FIG.69

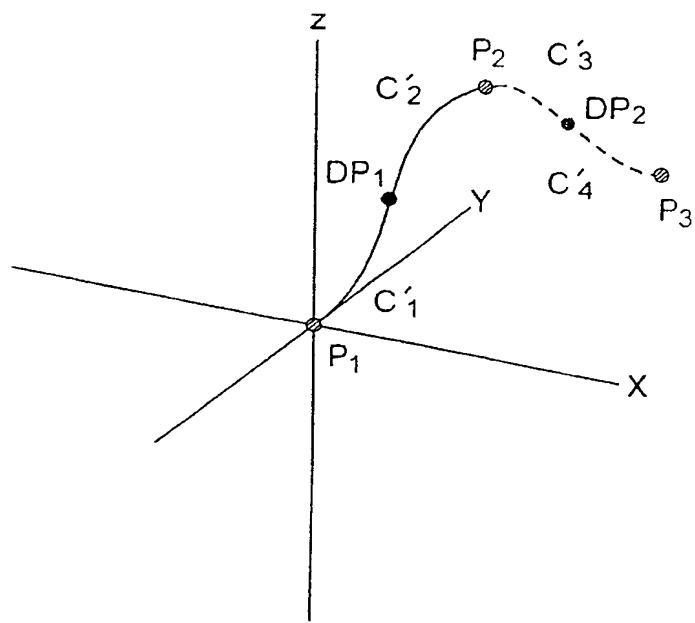


FIG.70

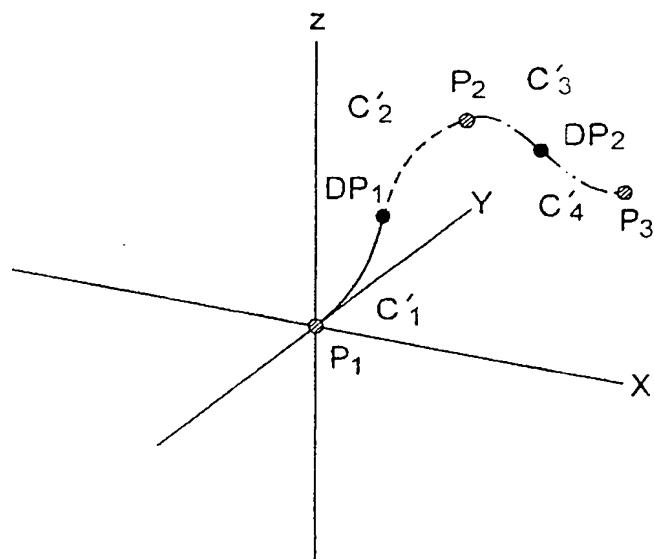


FIG.71

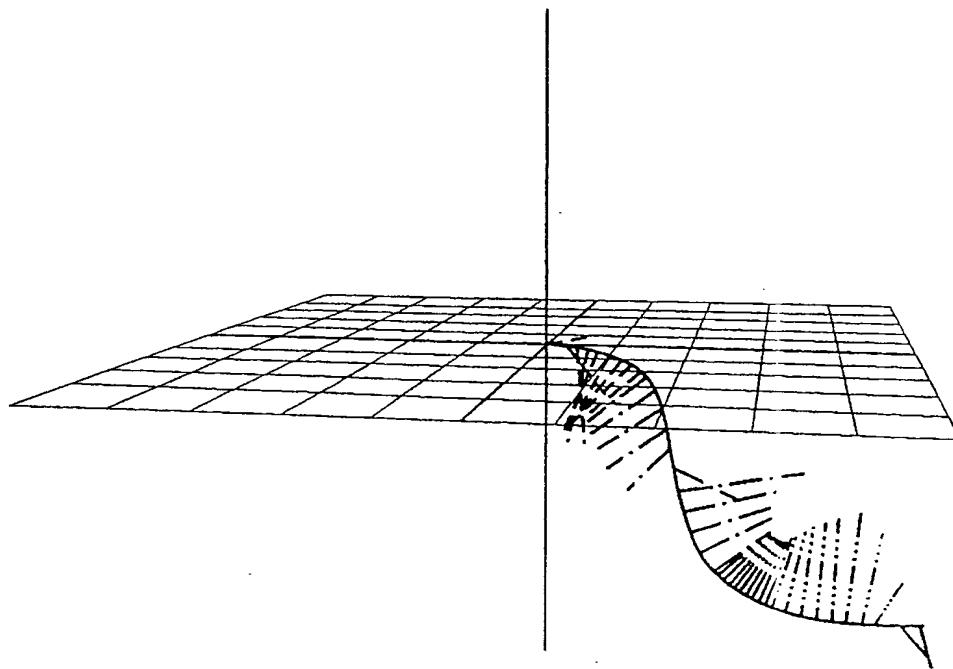


FIG.72

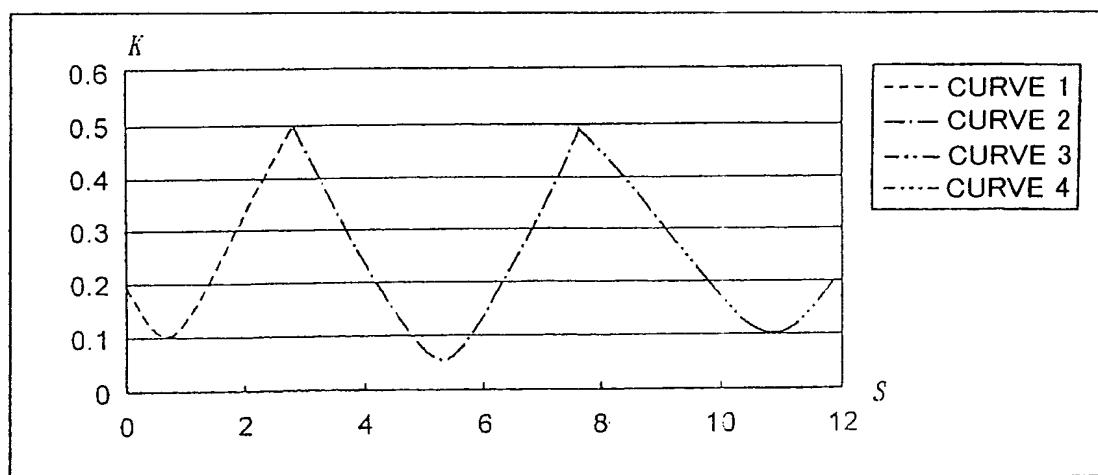


FIG.73

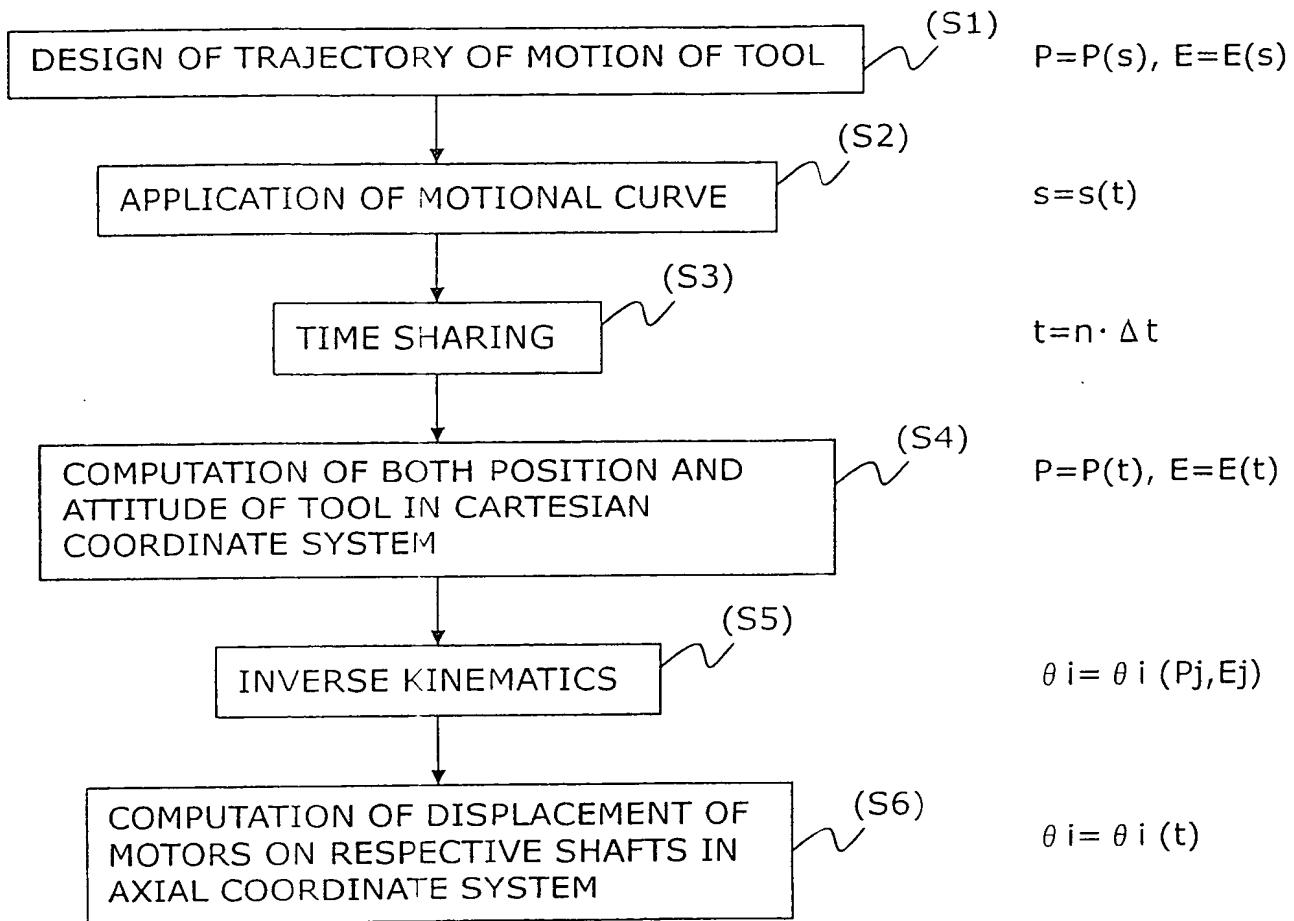


FIG.74

